RAW SEQUENCE LISTING
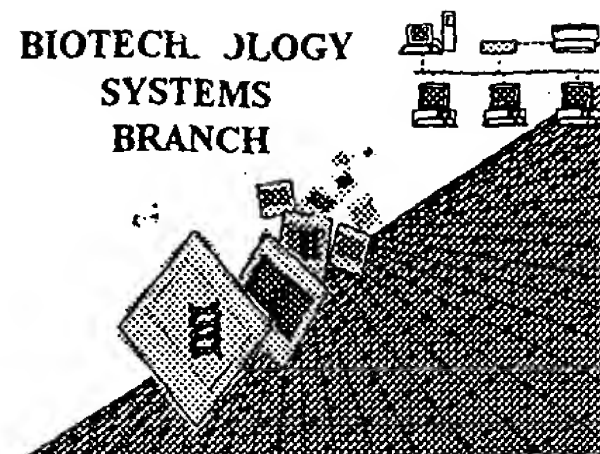# ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: ___O 9/159, 508A___

Source: ___OIPE___

Date Processed by STIC: ___5/30/2001___

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

BEST AVAILABLE COPY

OIPE

RAW SEQUENCE LISTING   DATE: 05/30/2001
PATENT APPLICATION: US/09/759,508A   TIME: 11:49:00

Input Set : A:\00786.381002.SEQLIST.TXT
Output Set: C:\CRF3\05302001\I759508A.raw

Does Not Comply
Corrected Diskette Needed

```
 4 <110> APPLICANT: Fishman, Mark C.
 6 <120> TITLE OF INVENTION: Methods for Diagnosing and Treating
 7        Heart Disease
 9 <130> FILE REFERENCE: 00786/381002
11 <140> CURRENT APPLICATION NUMBER: US 09/759,508A
12 <141> CURRENT FILING DATE: 2001-01-12
14 <150> PRIOR APPLICATION NUMBER: US 60/175,787
15 <151> PRIOR FILING DATE: 2000-01-12
17 <160> NUMBER OF SEQ ID NOS: 11
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
```

ERRORED SEQUENCES

Due to size of sequence, only errored pages shown.

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1394 <210> SEQ ID NO: 2
1395 <211> LENGTH: 26926
1396 <212> TYPE: PRT
1397 <213> ORGANISM: Homo sapiens
1399 <400> SEQUENCE: 2
1400 Met Thr Thr Gln Ala Pro Thr Phe Thr Gln Pro Leu Gln Ser Val Val
1401  1               5                  10                  15
1402 Val Leu Glu Gly Ser Thr Ala Thr Phe Glu Ala His Ile Ser Gly Phe
1403             20                  25                  30
1404 Pro Val Pro Glu Val Ser Trp Phe Arg Asp Gly Gln Val Ile Ser Thr
1405             35                  40                  45
1406 Ser Thr Leu Pro Gly Val Gln Ile Ser Phe Ser Asp Gly Arg Ala Lys
1407         50                  55                  60
1408 Leu Thr Ile Pro Ala Val Thr Lys Ala Asn Ser Gly Arg Tyr Ser Leu
1409 65                  70                  75                  80
1410 Lys Ala Thr Asn Gly Ser Gly Gln Ala Thr Ser Thr Ala Glu Leu Leu
1411                 85                  90                  95
1412 Val Lys Ala Glu Thr Ala Pro Pro Asn Phe Val Gln Arg Leu Gln Ser
1413             100                 105                 110
1414 Met Thr Val Arg Gln Gly Ser Gln Val Arg Leu Gln Val Arg Val Thr
1415             115                 120                 125
1416 Gly Ile Pro Thr Pro Val Val Lys Phe Tyr Arg Asp Gly Ala Glu Ile
1417         130                 135                 140
1418 Gln Ser Ser Leu Asp Phe Gln Ile Ser Gln Glu Gly Asp Leu Tyr Ser
1419 145                 150                 155                 160
1420 Leu Leu Ile Ala Glu Ala Tyr Pro Glu Asp Ser Gly Thr Tyr Ser Val
1421             165                 170                 175
1422 Asn Ala Thr Asn Ser Val Gly Arg Ala Thr Ser Thr Ala Glu Leu Leu
1423             180                 185                 190
1424 Val Gln Gly Glu Glu Glu Val Pro Ala Lys Lys Thr Lys Thr Ile Val
1425             195                 200                 205
1426 Ser Thr Ala Gln Ile Ser Glu Ser Arg Gln Thr Arg Ile Glu Lys Lys
1427         210                 215                 220
```

```
2604 Glu Gly Thr Asn Val Asn Ile Val Ala Lys Ile Lys Gly Val Pro Phe
2605          9635            9640            9645
2606 Pro Thr Leu Thr Trp Phe Lys Ala Pro Pro Lys Lys Pro Asp Asn Lys
2607     9650            9655            9660
2608 Glu Pro Val Leu Tyr Asp Thr His Val Asn Lys Leu Val Val Asp Asp
2609 9665            9670            9675            9680
2610 Thr Cys Thr Leu Val Ile Pro Gln Ser Arg Arg Ser Asp Thr Gly Leu
2611         9685            9690            9695
2612 Tyr Thr Ile Thr Ala Val Asn Asn Leu Gly Thr Ala Ser Lys Glu Met
2613         9700            9705            9710
2614 Arg Leu Asn Val Leu Gly Arg Pro Gly Pro Pro Val Gly Pro Ile Lys
2615         9715            9720            9725
2616 Phe Glu Ser Val Ser Ala Asp Gln Met Thr Leu Ser Trp Phe Pro Pro
2617     9730            9735            9740
2618 Lys Asp Asp Gly Gly Ser Lys Ile Thr Asn Tyr Val Ile Glu Lys Arg
2619 9745            9750            9755            9760
2620 Glu Ala Asn Arg Lys Thr Trp Val His Val Ser Ser Glu Pro Lys Glu
2621             9765            9770            9775
2622 Cys Thr Tyr Thr Ile Pro Lys Leu Leu Glu Gly His Glu Tyr Val Phe
2623         9780            9785            9790
2624 Arg Ile Met Ala Gln Asn Lys Tyr Gly Ile Gly Glu Pro Leu Asp Ser
2625     9795            9800            9805
2626 Glu Pro Glu Thr Ala Arg Asn Leu Phe Ser Val Pro Gly Ala Pro Asp
2627     9810            9815            9820
2628 Lys Pro Thr Val Ser Ser Val Thr Arg Asn Ser Met Thr Val Asn Trp
2629 9825            9830            9835            9840
2630 Glu Glu Pro Glu Tyr Asp Gly Gly Ser Pro Val Thr Gly Tyr Trp Leu
2631         9845            9850            9855
2632 Glu Met Lys Asp Thr Thr Ser Lys Arg Trp Lys Arg Val Asn Arg Asp
2633         9860            9865            9870
2634 Pro Ile Lys Ala Met Thr Leu Gly Val Ser Tyr Lys Val Thr Gly Leu
2635         9875            9880            9885
2636 Ile Glu Gly Ser Asp Tyr Gln Phe Arg Val Tyr Ala Ile Asn Ala Ala
2637     9890            9895            9900
2638 Gly Val Gly Pro Ala Ser Leu Pro Ser Asp Pro Ala Thr Ala Arg Asp
2639 9905            9910            9915            9920
2640 Pro Ile Ala Pro Pro Gly Pro Pro Phe Pro Lys Val Thr Asp Trp Thr
2641     9925            9930            9935
2642 Lys Ser Ser Ala Asp Leu Glu Trp Ser Pro Pro Leu Lys Asp Gly Gly
2643     9940            9945            9950
2644 Ser Lys Val Thr Gly Tyr Ile Val Glu Tyr Lys Glu Glu Gly Lys Glu
2645     9955            9960            9965
2646 Glu Trp Glu Lys Gly Lys Asp Lys Glu Val Arg Gly Thr Lys Leu Val
2647     9970            9975            9980
2648 Val Thr Gly Leu Lys Glu Gly Ala Phe Tyr Lys Phe Arg Val Ser Ala
2649 9985            9990            9995            10000
2650 Val Asn Ile Ala Gly Ile Gly Glu Pro Gly Glu Val Thr Asp Val Ile
2651                  10005          10010          10015
2652 Glu Met Lys Asp Arg Leu Val Ser Pro Asp Leu Gln Leu Asp Ala Ser
```

E--> 2651

FYI!

When numbering last amino acid on a line, please end the number under the last letter of the amino acid.

Numbers cannot "spill over" into next amino acid

Please leave a space between ending amino acid number AND beginning of next amino acid

5/30/01

RAW SEQUENCE LISTING   DATE: 05/30/2001
PATENT APPLICATION: **US/09/759,508A**   TIME: 11:49:02

Input Set : **A:\00786.381002.SEQLIST.TXT**
Output Set: **C:\CRF3\05302001\I759508A.raw**

```
E--> 2653          10020             10025             10030
     2654 Val Arg Asp Arg Ile Val Val His Ala Gly Gly Val Ile Arg Ile Ile
E--> 2655          10035             10040             10045
     2656 Ala Tyr Val Ser Gly Lys Pro Pro Pro Thr Val Thr Trp Asn Met Asn
E--> 2657     10050             10055             10060
     2658 Glu Arg Thr Leu Pro Gln Glu Ala Thr Ile Glu Thr Thr Ala Ile Ser
E--> 2659 10065             10070             10075             10080
     2660 Ser Ser Met Val Ile Lys Asn Cys Gln Arg Ser His Gln Gly Val Tyr
E--> 2661          10085             10090             10095
     2662 Ser Leu Leu Ala Lys Asn Glu Ala Gly Glu Arg Lys Lys Thr Ile Ile
E--> 2663          10100             10105             10110
     2664 Val Asp Val Leu Asp Val Pro Gly Pro Val Gly Thr Pro Phe Leu Ala
E--> 2665          10115             10120             10125
     2666 His Asn Leu Thr Asn Glu Ser Cys Lys Leu Thr Trp Phe Ser Pro Glu
E--> 2667     10130             10135             10140
     2668 Asp Asp Gly Gly Ser Pro Ile Thr Asn Tyr Val Ile Glu Lys Arg Glu
E--> 2669 10145             10150             10155             10160
     2670 Ser Asp Arg Arg Ala Trp Thr Pro Val Thr Tyr Thr Val Thr Arg Gln
E--> 2671          10165             10170             10175
     2672 Asn Ala Thr Val Gln Gly Leu Ile Gln Gly Lys Ala Tyr Phe Phe Arg
E--> 2673     10180             10185             10190
     2674 Ile Ala Ala Glu Asn Ser Ile Gly Met Gly Pro Phe Val Glu Thr Ser
E--> 2675     10195             10200             10205
     2676 Glu Ala Leu Val Ile Arg Glu Pro Ile Thr Val Pro Glu Arg Pro Glu
E--> 2677     10210             10215             10220
     2678 Asp Leu Glu Val Lys Glu Val Thr Lys Asn Thr Val Thr Leu Thr Trp
E--> 2679 10225             10230             10235             10240
     2680 Asn Pro Pro Lys Tyr Asp Gly Gly Ser Glu Ile Ile Asn Tyr Val Leu
E--> 2681          10245             10250             10255
     2682 Glu Ser Arg Leu Ile Gly Thr Glu Lys Phe His Lys Val Thr Asn Asp
E--> 2683     10260             10265             10270
     2684 Asn Leu Leu Ser Arg Lys Tyr Thr Val Lys Gly Leu Lys Glu Gly Asp
E--> 2685     10275             10280             10285
     2686 Thr Tyr Glu Tyr Arg Val Ser Ala Val Asn Ile Val Gly Gln Gly Lys
E--> 2687     10290             10295             10300
     2688 Pro Ser Phe Cys Thr Lys Pro Ile Thr Cys Lys Asp Glu Leu Ala Pro
E--> 2689 10305             10310             10315             10320
     2690 Pro Thr Leu His Leu Asp Phe Arg Asp Lys Leu Thr Ile Arg Val Gly
E--> 2691          10325             10330             10335
     2692 Glu Ala Phe Ala Leu Thr Gly Arg Tyr Ser Gly Lys Pro Lys Pro Lys
E--> 2693     10340             10345             10350
     2694 Val Ser Trp Phe Lys Asp Glu Ala Asp Val Leu Glu Asp Asp Arg Thr
E--> 2695     10355             10360             10365
     2696 His Ile Lys Thr Thr Pro Ala Thr Leu Ala Leu Glu Lys Ile Lys Ala
E--> 2697     10370             10375             10380
     2698 Lys Arg Ser Asp Ser Gly Lys Tyr Cys Val Val Val Glu Asn Ser Thr
E--> 2699 10385             10390             10395             10400
     2700 Gly Ser Arg Lys Gly Phe Cys Gln Val Asn Val Val Asp His Pro Gly
E--> 2701          10405             10410             10415
```

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        2702 Pro Pro Val Gly Pro Val Ser Phe Asp Glu Val Thr Lys Asp Tyr Met
E--> 2703          10420             10425             10430
        2704 Val Ile Ser Trp Lys Pro Pro Leu Asp Asp Gly Gly Ser Lys Ile Thr
E--> 2705          10435             10440             10445
        2706 Asn Tyr Ile Ile Glu Lys Lys Glu Val Gly Lys Asp Val Trp Met Pro
E--> 2707          10450             10455             10460
        2708 Val Thr Ser Ala Ser Ala Lys Thr Thr Cys Lys Val Ser Lys Leu Leu
E--> 2709 10465             10470             10475             10480
        2710 Glu Gly Lys Asp Tyr Ile Phe Arg Ile His Ala Glu Asn Leu Tyr Gly
E--> 2711          10485             10490             10495
        2712 Ile Ser Asp Pro Leu Val Ser Asp Ser Met Lys Ala Lys Asp Arg Phe
E--> 2713          10500             10505             10510
        2714 Arg Val Pro Asp Ala Pro Asp Gln Pro Ile Val Thr Glu Val Thr Lys
E--> 2715          10515             10520             10525
        2716 Asp Ser Ala Leu Val Thr Trp Asn Lys Pro His Asp Gly Gly Lys Pro
E--> 2717          10530             10535             10540
        2718 Ile Thr Asn Tyr Ile Leu Glu Lys Arg Glu Thr Met Ser Lys Arg Trp
E--> 2719 10545             10550             10555             10560
        2720 Ala Arg Val Thr Lys Asp Pro Ile His Pro Tyr Thr Lys Phe Arg Val
E--> 2721          10565             10570             10575
        2722 Pro Asp Leu Leu Glu Gly Cys Gln Tyr Glu Phe Arg Val Ser Ala Glu
E--> 2723          10580             10585             10590
        2724 Asn Glu Ile Gly Ile Gly Asp Pro Ser Pro Pro Ser Lys Pro Val Phe
E--> 2725          10595             10600             10605
        2726 Ala Lys Asp Pro Ile Ala Lys Pro Ser Pro Pro Val Asn Pro Glu Ala
E--> 2727          10610             10615             10620
        2728 Ile Asp Thr Thr Cys Asn Ser Val Asp Leu Thr Trp Gln Pro Pro Arg
E--> 2729 10625             10630             10635             10640
        2730 His Asp Gly Gly Ser Lys Ile Leu Gly Tyr Ile Val Glu Tyr Gln Lys
E--> 2731          10645             10650             10655
        2732 Val Gly Asp Glu Glu Trp Arg Arg Ala Asn His Thr Pro Glu Ser Cys
E--> 2733          10660             10665             10670
        2734 Pro Glu Thr Lys Tyr Lys Val Thr Gly Leu Arg Asp Gly Gln Thr Tyr
E--> 2735          10675             10680             10685
        2736 Lys Phe Arg Val Leu Ala Val Asn Ala Ala Gly Glu Ser Asp Pro Ala
E--> 2737          10690             10695             10700
        2738 His Val Pro Glu Pro Val Leu Val Lys Asp Arg Leu Glu Pro Pro Glu
E--> 2739 10705             10710             10715             10720
        2740 Leu Ile Leu Asp Ala Asn Met Ala Arg Glu Gln His Ile Lys Val Gly
E--> 2741          10725             10730             10735
        2742 Asp Thr Leu Arg Leu Ser Ala Ile Ile Lys Gly Val Pro Phe Pro Lys
E--> 2743          10740             10745             10750
        2744 Val Thr Trp Lys Lys Glu Asp Arg Asp Ala Pro Thr Lys Ala Arg Ile
E--> 2745          10755             10760             10765
        2746 Asp Val Thr Pro Val Gly Ser Lys Leu Glu Ile Arg Asn Ala Ala His
E--> 2747          10770             10775             10780
        2748 Glu Asp Gly Gly Ile Tyr Ser Leu Thr Val Glu Asn Pro Ala Gly Ser
E--> 2749 10785             10790             10795             10800
        2750 Lys Thr Val Ser Val Lys Val Leu Val Leu Asp Lys Pro Gly Pro Pro
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E--> 2751                10805              10810              10815
     2752 Arg Asp Leu Glu Val Ser Glu Ile Arg Lys Asp Ser Cys Tyr Leu Thr
E--> 2753                10820              10825              10830
     2754 Trp Lys Glu Pro Leu Asp Asp Gly Gly Ser Val Ile Thr Asn Tyr Val
E--> 2755           10835              10840              10845
     2756 Val Glu Arg Arg Asp Val Ala Ser Ala Gln Trp Ser Pro Leu Ser Ala
E--> 2757      10850              10855              10860
     2758 Thr Ser Lys Lys Lys Ser His Phe Ala Lys His Leu Asn Glu Gly Asn
E--> 2759 10865              10870              10875              10880
     2760 Gln Tyr Leu Phe Arg Val Ala Ala Glu Asn Gln Tyr Gly Arg Gly Pro
E--> 2761                10885              10890              10895
     2762 Phe Val Glu Thr Pro Lys Pro Ile Lys Ala Leu Asp Pro Leu His Pro
E--> 2763           10900              10905              10910
     2764 Pro Gly Pro Pro Lys Asp Leu His His Val Asp Val Asp Lys Thr Glu
E--> 2765           10915              10920              10925
     2766 Val Ser Leu Val Trp Asn Lys Pro Asp Arg Asp Gly Gly Ser Pro Ile
E--> 2767      10930              10935              10940
     2768 Thr Gly Tyr Leu Val Glu Tyr Gln Glu Glu Gly Thr Gln Asp Trp Ile
E--> 2769 10945              10950              10955              10960
     2770 Lys Phe Lys Thr Val Thr Asn Leu Glu Cys Val Val Thr Gly Leu Gln
E--> 2771                10965              10970              10975
     2772 Gln Gly Lys Thr Tyr Arg Phe Arg Val Lys Ala Glu Asn Ile Val Gly
E--> 2773           10980              10985              10990
     2774 Leu Gly Leu Pro Asp Thr Thr Ile Pro Ile Glu Cys Gln Glu Lys Leu
E--> 2775      10995              11000              11005
     2776 Val Pro Pro Ser Val Glu Leu Asp Val Lys Leu Ile Glu Gly Leu Val
E--> 2777      11010              11015              11020
     2778 Val Lys Ala Gly Thr Thr Val Arg Phe Pro Ala Ile Ile Arg Gly Val
E--> 2779 11025              11030              11035              11040
     2780 Pro Val Pro Thr Ala Lys Trp Thr Thr Asp Gly Ser Glu Ile Lys Thr
E--> 2781                11045              11050              11055
     2782 Asp Glu His Tyr Thr Val Glu Thr Asp Asn Phe Ser Ser Val Leu Thr
E--> 2783           11060              11065              11070
     2784 Ile Lys Asn Cys Leu Arg Arg Asp Thr Gly Glu Tyr Gln Ile Thr Val
E--> 2785           11075              11080              11085
     2786 Ser Asn Ala Ala Gly Ser Lys Thr Val Ala Val His Leu Thr Val Leu
E--> 2787      11090              11095              11100
     2788 Asp Val Pro Gly Pro Pro Thr Gly Pro Ile Asn Ile Leu Asp Val Thr
E--> 2789 11105              11110              11115              11120
     2790 Pro Glu His Met Thr Ile Ser Trp Gln Pro Pro Lys Asp Asp Gly Gly
E--> 2791                11125              11130              11135
     2792 Ser Pro Val Ile Asn Tyr Ile Val Glu Lys Gln Asp Thr Arg Lys Asp
E--> 2793           11140              11145              11150
     2794 Thr Trp Gly Val Val Ser Ser Gly Ser Ser Lys Thr Lys Leu Lys Ile
E--> 2795           11155              11160              11165
     2796 Pro His Leu Gln Lys Gly Cys Glu Tyr Val Phe Arg Val Arg Ala Glu
E--> 2797      11170              11175              11180
     2798 Asn Lys Ile Gly Val Gly Pro Pro Leu Asp Ser Thr Pro Thr Val Ala
E--> 2799 11185              11190              11195              11200
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RAW SEQUENCE LISTING   DATE: 05/30/2001
PATENT APPLICATION: US/09/759,508A   TIME: 11:49:02

Input Set : A:\00786.381002.SEQLIST.TXT
Output Set: C:\CRF3\05302001\I759508A.raw

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      2800 Lys His Lys Phe Ser Pro Pro Ser Pro Pro Gly Lys Pro Val Val Thr
E--> 2801           11205          11210          11215
      2802 Asp Ile Thr Glu Asn Ala Ala Thr Val Ser Trp Thr Leu Pro Lys Ser
E--> 2803           11220          11225          11230
      2804 Asp Gly Gly Ser Pro Ile Thr Gly Tyr Tyr Met Glu Arg Arg Glu Val
E--> 2805           11235          11240          11245
      2806 Thr Gly Lys Trp Val Arg Val Asn Lys Thr Pro Ile Ala Asp Leu Lys
E--> 2807           11250          11255          11260
      2808 Phe Arg Val Thr Gly Leu Tyr Glu Gly Asn Thr Tyr Glu Phe Arg Val
E--> 2809 11265          11270          11275          11280
      2810 Phe Ala Glu Asn Leu Ala Gly Leu Ser Lys Pro Ser Pro Ser Ser Asp
E--> 2811           11285          11290          11295
      2812 Pro Ile Lys Ala Cys Arg Pro Ile Lys Pro Pro Gly Pro Pro Ile Asn
E--> 2813           11300          11305          11310
      2814 Pro Lys Leu Lys Asp Lys Ser Arg Glu Thr Ala Asp Leu Val Trp Thr
E--> 2815           11315          11320          11325
      2816 Lys Pro Leu Ser Asp Gly Gly Ser Pro Ile Leu Gly Tyr Val Val Glu
E--> 2817           11330          11335          11340
      2818 Cys Gln Lys Pro Gly Thr Ala Gln Trp Asn Arg Ile Asn Lys Asp Glu
E--> 2819 11345          11350          11355          11360
      2820 Leu Ile Arg Gln Cys Ala Phe Arg Val Pro Gly Leu Ile Glu Gly Asn
E--> 2821           11365          11370          11375
      2822 Glu Tyr Arg Phe Arg Ile Lys Ala Ala Asn Ile Val Gly Glu Gly Glu
E--> 2823           11380          11385          11390
      2824 Pro Arg Glu Leu Ala Glu Ser Val Ile Ala Lys Asp Ile Leu His Pro
E--> 2825           11395          11400          11405
      2826 Pro Glu Val Glu Leu Asp Val Thr Cys Arg Asp Val Ile Thr Val Arg
E--> 2827 11410          11415          11420
      2828 Val Gly Gln Thr Ile Arg Ile Leu Ala Arg Val Lys Gly Arg Pro Glu
E--> 2829 11425          11430          11435          11440
      2830 Pro Asp Ile Thr Trp Thr Lys Glu Gly Lys Val Leu Val Arg Glu Lys
E--> 2831           11445          11450          11455
      2832 Arg Val Asp Leu Ile Gln Asp Leu Pro Arg Val Glu Leu Gln Ile Lys
E--> 2833           11460          11465          11470
      2834 Glu Ala Val Arg Ala Asp His Gly Lys Tyr Ile Ile Ser Ala Lys Asn
E--> 2835           11475          11480          11485
      2836 Ser Ser Gly His Ala Gln Gly Ser Ala Ile Val Asn Val Leu Asp Arg
E--> 2837           11490          11495          11500
      2838 Pro Gly Pro Cys Gln Asn Leu Lys Val Thr Asn Val Thr Lys Glu Asn
E--> 2839 11505          11510          11515          11520
      2840 Cys Thr Ile Ser Trp Glu Asn Pro Leu Asp Asn Gly Gly Ser Glu Ile
E--> 2841           11525          11530          11535
      2842 Thr Asn Phe Ile Val Glu Tyr Arg Lys Pro Asn Gln Lys Gly Trp Ser
E--> 2843           11540          11545          11550
      2844 Ile Val Ala Ser Asp Val Thr Lys Arg Leu Ile Lys Ala Asn Leu Leu
E--> 2845           11555          11560          11565
      2846 Ala Asn Asn Glu Tyr Tyr Phe Arg Val Cys Ala Glu Asn Lys Val Gly
E--> 2847           11570          11575          11580
      2848 Val Gly Pro Thr Ile Glu Thr Lys Thr Pro Ile Leu Ala Ile Asn Pro
```

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E--> 2849 11585              11590              11595              11600
     2850 Ile Asp Arg Pro Gly Glu Pro Glu Asn Leu His Ile Ala Asp Lys Gly
E--> 2851              11605              11610              11615
     2852 Lys Thr Phe Val Tyr Leu Lys Trp Arg Arg Pro Asp Tyr Asp Gly Gly
E--> 2853              11620              11625              11630
     2854 Ser Pro Asn Leu Ser Tyr His Val Glu Arg Arg Leu Lys Gly Ser Asp
E--> 2855              11635              11640              11645
     2856 Asp Trp Glu Arg Val His Lys Gly Ser Ile Lys Glu Thr His Tyr Met
E--> 2857     11650              11655              11660
     2858 Val Asp Arg Cys Val Glu Asn Gln Ile Tyr Glu Phe Arg Val Gln Thr
E--> 2859 11665              11670              11675              11680
     2860 Lys Asn Glu Gly Gly Glu Ser Asp Trp Val Lys Thr Glu Glu Val Val
E--> 2861              11685              11690              11695
     2862 Val Lys Glu Asp Leu Gln Lys Pro Val Leu Asp Leu Lys Leu Ser Gly
E--> 2863         11700              11705              11710
     2864 Val Leu Thr Val Lys Ala Gly Asp Thr Ile Arg Leu Glu Ala Gly Val
E--> 2865         11715              11720              11725
     2866 Arg Gly Lys Pro Phe Pro Glu Val Ala Trp Thr Lys Asp Lys Asp Ala
E--> 2867     11730              11735              11740
     2868 Thr Asp Leu Thr Arg Ser Pro Arg Val Lys Ile Asp Thr Arg Ala Asp
E--> 2869 11745              11750              11755              11760
     2870 Ser Ser Lys Phe Ser Leu Thr Lys Ala Lys Arg Ser Asp Gly Gly Lys
E--> 2871              11765              11770              11775
     2872 Tyr Val Val Thr Ala Thr Asn Thr Ala Gly Ser Phe Val Ala Tyr Ala
E--> 2873         11780              11785              11790
     2874 Thr Val Asn Val Leu Asp Lys Pro Gly Pro Val Arg Asn Leu Lys Ile
E--> 2875         11795              11800              11805
     2876 Val Asp Val Ser Ser Asp Arg Cys Thr Val Cys Trp Asp Pro Pro Glu
E--> 2877     11810              11815              11820
     2878 Asp Asp Gly Gly Cys Glu Ile Gln Asn Tyr Ile Leu Glu Lys Cys Glu
E--> 2879 11825              11830              11835              11840
     2880 Thr Lys Arg Met Val Trp Ser Thr Tyr Ser Ala Thr Val Leu Thr Pro
E--> 2881              11845              11850              11855
     2882 Gly Thr Thr Val Thr Arg Leu Ile Glu Gly Asn Glu Tyr Ile Phe Arg
E--> 2883         11860              11865              11870
     2884 Val Arg Ala Glu Asn Lys Ile Gly Thr Gly Pro Pro Thr Glu Ser Lys
E--> 2885     11875              11880              11885
     2886 Pro Val Ile Ala Lys Thr Lys Tyr Asp Lys Pro Gly Arg Pro Asp Pro
E--> 2887     11890              11895              11900
     2888 Pro Glu Val Thr Lys Val Ser Lys Glu Glu Met Thr Val Val Trp Asn
E--> 2889 11905              11910              11915              11920
     2890 Pro Pro Glu Tyr Asp Gly Gly Lys Ser Ile Thr Gly Tyr Phe Leu Glu
E--> 2891              11925              11930              11935
     2892 Lys Lys Glu Lys His Ser Thr Arg Trp Val Pro Val Asn Lys Ser Ala
E--> 2893         11940              11945              11950
     2894 Ile Pro Glu Arg Arg Met Lys Val Gln Asn Leu Leu Pro Asp His Glu
E--> 2895     11955              11960              11965
     2896 Tyr Gln Phe Arg Val Lys Ala Glu Asn Glu Ile Gly Ile Gly Glu Pro
E--> 2897     11970              11975              11980
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```
         2898 Ser Leu Pro Ser Arg Pro Val Val Ala Lys Asp Pro Ile Glu Pro Pro
E--> 2899 11985                11990            11995                12000
         2900 Gly Pro Pro Thr Asn Phe Arg Val Val Asp Thr Thr Lys His Ser Ile
E--> 2901           12005            12010            12015
         2902 Thr Leu Gly Trp Gly Lys Pro Val Tyr Asp Gly Gly Ala Pro Ile Ile
E--> 2903           12020            12025            12030
         2904 Gly Tyr Val Val Glu Met Arg Pro Lys Ile Ala Asp Ala Ser Pro Asp
E--> 2905           12035            12040            12045
         2906 Glu Gly Trp Lys Arg Cys Asn Ala Ala Ala Gln Leu Val Arg Lys Glu
E--> 2907           12050            12055            12060
         2908 Phe Thr Val Thr Ser Leu Asp Glu Asn Gln Glu Tyr Glu Phe Arg Val
E--> 2909 12065                12070            12075                12080
         2910 Cys Ala Gln Asn Gln Val Gly Ile Gly Arg Pro Ala Glu Leu Lys Glu
E--> 2911           12085            12090            12095
         2912 Ala Ile Lys Pro Lys Glu Ile Leu Glu Pro Pro Glu Ile Asp Leu Asp
E--> 2913           12100            12105            12110
         2914 Ala Ser Met Arg Lys Leu Val Ile Val Arg Ala Gly Cys Pro Ile Arg
E--> 2915           12115            12120            12125
         2916 Leu Phe Ala Ile Val Arg Gly Arg Pro Ala Pro Lys Val Thr Trp Arg
E--> 2917           12130            12135            12140
         2918 Lys Val Gly Ile Asp Asn Val Val Arg Lys Gly Gln Val Asp Leu Val
E--> 2919 12145                12150            12155                12160
         2920 Asp Thr Met Ala Phe Leu Val Ile Pro Asn Ser Thr Arg Asp Asp Ser
E--> 2921           12165            12170            12175
         2922 Gly Lys Tyr Ser Leu Thr Leu Val Asn Pro Ala Gly Glu Lys Ala Val
E--> 2923           12180            12185            12190
         2924 Phe Val Asn Val Arg Val Leu Asp Thr Pro Gly Pro Val Ser Asp Leu
E--> 2925           12195            12200            12205
         2926 Lys Val Ser Asp Val Thr Lys Thr Ser Cys His Val Ser Trp Ala Pro
E--> 2927           12210            12215            12220
         2928 Pro Glu Asn Asp Gly Gly Ser Gln Val Thr His Tyr Ile Val Glu Lys
E--> 2929 12225                12230            12235                12240
         2930 Arg Glu Ala Asp Arg Lys Thr Trp Ser Thr Val Thr Pro Glu Val Lys
E--> 2931           12245            12250            12255
         2932 Lys Thr Ser Phe His Val Thr Asn Leu Val Pro Gly Asn Glu Tyr Tyr
E--> 2933           12260            12265            12270
         2934 Phe Arg Val Thr Ala Val Asn Glu Tyr Gly Pro Gly Val Pro Thr Asp
E--> 2935           12275            12280            12285
         2936 Val Pro Lys Pro Val Leu Ala Ser Asp Pro Leu Ser Glu Pro Asp Pro
E--> 2937           12290          · 12295            12300
         2938 Pro Arg Lys Leu Glu Ala Thr Glu Met Thr Lys Asn Ser Ala Thr Leu
E--> 2939 12305                12310            12315                12320
         2940 Ala Trp Leu Pro Pro Leu Arg Asp Gly Gly Ala Lys Ile Asp Gly Tyr
E--> 2941           12325            12330            12335
         2942 Ile Ile Ser Tyr Arg Glu Glu Glu Gln Pro Ala Asp Arg Trp Thr Glu
E--> 2943           12340            12345            12350
         2944 Tyr Ser Val Val Lys Asp Leu Ser Leu Val Val Thr Gly Leu Lys Glu
E--> 2945           12355            12360            12365
         2946 Gly Lys Lys Tyr Lys Phe Arg Val Ala Ala Arg Asn Ala Val Gly Val
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E--> 2947      12370            12375            12380
     2948 Ser Leu Pro Arg Glu Ala Glu Gly Val Tyr Glu Ala Lys Glu Gln Leu
E--> 2949 12385            12390            12395            12400
     2950 Leu Pro Pro Lys Ile Leu Met Pro Glu Gln Ile Thr Ile Lys Ala Gly
E--> 2951            12405            12410            12415
     2952 Lys Lys Leu Arg Ile Glu Ala His Val Tyr Gly Lys Pro His Pro Thr
E--> 2953            12420            12425            12430
     2954 Cys Lys Trp Lys Lys Gly Glu Asp Glu Val Val Thr Ser Ser His Leu
E--> 2955      12435            12440            12445
     2956 Ala Val His Lys Ala Asp Ser Ser Ser Ile Leu Ile Ile Lys Asp Val
E--> 2957      12450            12455            12460
     2958 Thr Arg Lys Asp Ser Gly Tyr Tyr Ser Leu Thr Ala Glu Asn Ser Ser
E--> 2959 12465            12470            12475            12480
     2960 Gly Thr Asp Thr Gln Lys Ile Lys Val Val Val Met Asp Ala Pro Gly
E--> 2961            12485            12490            12495
     2962 Pro Pro Gln Pro Pro Phe Asp Ile Ser Asp Ile Asp Ala Asp Ala Cys
E--> 2963            12500            12505            12510
     2964 Ser Leu Ser Trp His Ile Pro Leu Glu Asp Gly Gly Ser Asn Ile Thr
E--> 2965      12515            12520            12525
     2966 Asn Tyr Ile Val Glu Lys Cys Asp Val Ser Arg Gly Asp Trp Val Thr
E--> 2967      12530            12535            12540
     2968 Ala Leu Ala Ser Val Thr Lys Thr Ser Cys Arg Val Gly Lys Leu Ile
E--> 2969 12545            12550            12555            12560
     2970 Pro Gly Gln Glu Tyr Ile Phe Arg Val Arg Ala Glu Asn Arg Phe Gly
E--> 2971            12565            12570            12575
     2972 Ile Ser Glu Pro Leu Thr Ser Pro Lys Met Val Ala Gln Phe Pro Phe
E--> 2973            12580            12585            12590
     2974 Gly Val Pro Ser Glu Pro Lys Asn Ala Arg Val Thr Lys Val Asn Lys
E--> 2975      12595            12600            12605
     2976 Asp Cys Ile Phe Val Ala Trp Asp Arg Pro Asp Ser Asp Gly Gly Ser
E--> 2977      12610            12615            12620
     2978 Pro Ile Ile Gly Tyr Leu Ile Glu Arg Lys Glu Arg Asn Ser Leu Leu
E--> 2979 12625            12630            12635            12640
     2980 Trp Val Lys Ala Asn Asp Thr Leu Val Arg Ser Thr Glu Tyr Pro Cys
E--> 2981            12645            12650            12655
     2982 Ala Gly Leu Val Glu Gly Leu Glu Tyr Ser Phe Arg Ile Tyr Ala Leu
E--> 2983            12660            12665            12670
     2984 Asn Lys Ala Gly Ser Ser Pro Pro Ser Lys Pro Thr Glu Tyr Val Thr
E--> 2985      12675            12680            12685
     2986 Ala Arg Met Pro Val Asp Pro Pro Gly Lys Pro Glu Val Ile Asp Val
E--> 2987      12690            12695            12700
     2988 Thr Lys Ser Thr Val Ser Leu Ile Trp Ala Arg Pro Lys His Asp Gly
E--> 2989 12705            12710            12715            12720
     2990 Gly Ser Lys Ile Ile Gly Tyr Phe Val Glu Ala Cys Lys Leu Pro Gly
E--> 2991            12725            12730            12735
     2992 Asp Lys Trp Val Arg Cys Asn Thr Ala Pro His Gln Ile Pro Gln Glu
E--> 2993            12740            12745            12750
     2994 Glu Tyr Thr Ala Thr Gly Leu Glu Glu Lys Ala Gln Tyr Gln Phe Arg
E--> 2995      12755            12760            12765
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         2996 Ala Ile Ala Arg Thr Ala Val Asn Ile Ser Pro Pro Ser Glu Pro Ser
E--> 2997      12770          12775          12780
         2998 Asp Pro Val Thr Ile Leu Ala Glu Asn Val Pro Pro Arg Ile Asp Leu
E--> 2999 12785          12790          12795          12800
         3000 Ser Val Ala Met Lys Ser Leu Leu Thr Val Lys Ala Gly Thr Asn Val
E--> 3001          12805          12810          12815
         3002 Cys Leu Asp Ala Thr Val Phe Gly Lys Pro Met Pro Thr Val Ser Trp
E--> 3003          12820          12825          12830
         3004 Lys Lys Asp Gly Thr Leu Leu Lys Pro Ala Glu Gly Ile Lys Met Ala
E--> 3005          12835          12840          12845
         3006 Met Gln Arg Asn Leu Cys Thr Leu Glu Leu Phe Ser Val Asn Arg Lys
E--> 3007          12850          12855          12860
         3008 Asp Ser Gly Asp Tyr Thr Ile Thr Ala Glu Asn Ser Ser Gly Ser Lys
E--> 3009 12865          12870          12875          12880
         3010 Ser Ala Thr Ile Lys Leu Lys Val Leu Asp Lys Pro Gly Pro Pro Ala
E--> 3011          12885          12890          12895
         3012 Ser Val Lys Ile Asn Lys Met Tyr Ser Asp Arg Ala Met Leu Ser Trp
E--> 3013          12900          12905          12910
         3014 Glu Pro Pro Leu Glu Asp Gly Gly Ser Glu Ile Thr Asn Tyr Ile Val
E--> 3015          12915          12920          12925
         3016 Asp Lys Arg Glu Thr Ser Arg Pro Asn Trp Ala Gln Val Ser Ala Thr
E--> 3017      12930          12935          12940
         3018 Val Pro Ile Thr Ser Cys Ser Val Glu Lys Leu Ile Glu Gly His Glu
E--> 3019 12945          12950          12955          12960
         3020 Tyr Gln Phe Arg Ile Cys Ala Glu Asn Lys Tyr Gly Val Gly Asp Pro
E--> 3021          12965          12970          12975
         3022 Val Phe Thr Glu Pro Ala Ile Ala Lys Asn Pro Tyr Asp Pro Pro Gly
E--> 3023          12980          12985          12990
         3024 Arg Cys Asp Pro Pro Val Ile Ser Asn Ile Thr Lys Asp His Met Thr
E--> 3025          12995          13000          13005
         3026 Val Ser Trp Lys Pro Pro Ala Asp Asp Gly Gly Ser Pro Ile Thr Gly
E--> 3027      13010          13015          13020
         3028 Tyr Leu Leu Glu Lys Arg Glu Thr Gln Ala Val Asn Trp Thr Lys Val
E--> 3029 13025          13030          13035          13040
         3030 Asn Arg Lys Pro Ile Ile Glu Arg Thr Leu Lys Ala Thr Gly Leu Gln
E--> 3031          13045          13050          13055
         3032 Glu Gly Thr Glu Tyr Glu Phe Arg Val Thr Ala Ile Asn Lys Ala Gly
E--> 3033          13060          13065          13070
         3034 Pro Gly Lys Pro Ser Asp Ala Ser Lys Ala Ala Tyr Ala Arg Asp Pro
E--> 3035      13075          13080          13085
         3036 Gln Tyr Pro Pro Ala Pro Pro Ala Phe Pro Lys Val Tyr Asp Thr Thr
E--> 3037      13090          13095          13100
         3038 Arg Ser Ser Val Ser Leu Ser Trp Gly Lys Pro Ala Tyr Asp Gly Gly
E--> 3039 13105          13110          13115          13120
         3040 Ser Pro Ile Ile Gly Tyr Leu Val Glu Val Lys Arg Ala Asp Ser Asp
E--> 3041          13125          13130          13135
         3042 Asn Trp Val Arg Cys Asn Leu Pro Gln Asn Leu Gln Lys Thr Arg Phe
E--> 3043          13140          13145          13150
         3044 Glu Val Thr Gly Leu Met Glu Asp Thr Gln Tyr Gln Phe Arg Val Tyr
```

Input Set : **A:\00786.381002.SEQLIST.TXT**
Output Set: **C:\CRF3\05302001\I759508A.raw**

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E--> 3045          13155              13160              13165
     3046 Ala Val Asn Lys Ile Gly Tyr Ser Asp Pro Ser Asp Val Pro Asp Lys
E--> 3047      13170              13175              13180
     3048 His Tyr Pro Lys Asp Ile Leu Ile Pro Pro Glu Gly Glu His Asp Ala
E--> 3049 13185          13190              13195              13200
     3050 Asp Leu Arg Lys Thr Leu Ile Leu Arg Ala Gly Val Thr Met Arg Leu
E--> 3051          13205              13210              13215
     3052 Tyr Val Pro Val Lys Gly Arg Pro Pro Lys Ile Thr Trp Ser Lys
E--> 3053          13220              13225              13230
     3054 Pro Asn Val Asn Leu Arg Asp Arg Ile Gly Leu Asp Ile Lys Ser Thr
E--> 3055          13235              13240              13245
     3056 Asp Phe Asp Thr Phe Leu Arg Cys Glu Asn Val Asn Lys Tyr Asp Ala
E--> 3057      13250              13255              13260
     3058 Gly Lys Tyr Ile Leu Thr Leu Glu Asn Ser Cys Gly Lys Lys Glu Tyr
E--> 3059 13265          13270              13275              13280
     3060 Thr Ile Val Val Lys Val Leu Asp Thr Pro Gly Pro Pro Ile Asn Val
E--> 3061          13285              13290              13295
     3062 Thr Val Lys Glu Ile Ser Lys Asp Ser Ala Tyr Val Thr Trp Glu Pro
E--> 3063          13300              13305              13310
     3064 Pro Ile Ile Asp Gly Gly Ser Pro Ile Ile Asn Tyr Val Val Gln Lys
E--> 3065          13315              13320              13325
     3066 Arg Asp Ala Glu Arg Lys Ser Trp Ser Thr Val Thr Thr Glu Cys Ser
E--> 3067      13330              13335              13340
     3068 Lys Thr Ser Phe Arg Val Pro Asn Leu Glu Glu Gly Lys Ser Tyr Phe
E--> 3069 13345          13350              13355              13360
     3070 Phe Arg Val Phe Ala Glu Asn Glu Tyr Gly Ile Gly Asp Pro Gly Glu
E--> 3071          13365              13370              13375
     3072 Thr Arg Asp Ala Val Lys Ala Ser Gln Thr Pro Gly Pro Val Val Asp
E--> 3073          13380              13385              13390
     3074 Leu Lys Val Arg Ser Val Ser Lys Ser Ser Cys Ser Ile Gly Trp Lys
E--> 3075          13395              13400              13405
     3076 Lys Pro His Ser Asp Gly Gly Ser Arg Ile Ile Gly Tyr Val Val Asp
E--> 3077      13410              13415              13420
     3078 Phe Leu Thr Glu Glu Asn Lys Trp Gln Arg Val Met Lys Ser Leu Ser
E--> 3079 13425          13430              13435              13440
     3080 Leu Gln Tyr Ser Ala Lys Asp Leu Thr Glu Gly Lys Glu Tyr Thr Phe
E--> 3081          13445              13450              13455
     3082 Arg Val Ser Ala Glu Asn Glu Asn Gly Glu Gly Thr Pro Ser Glu Ile
E--> 3083          13460              13465              13470
     3084 Thr Val Val Ala Arg Asp Asp Val Val Ala Pro Asp Leu Asp Leu Lys
E--> 3085          13475              13480              13485
     3086 Gly Leu Pro Asp Leu Cys Tyr Leu Ala Lys Glu Asn Ser Asn Phe Arg
E--> 3087      13490              13495              13500
     3088 Leu Lys Ile Pro Ile Lys Gly Lys Pro Ala Pro Ser Val Ser Trp Lys
E--> 3089 13505          13510              13515              13520
     3090 Lys Gly Glu Asp Pro Leu Ala Thr Asp Thr Arg Val Ser Val Glu Ser
E--> 3091          13525              13530              13535
     3092 Ser Ala Val Asn Thr Thr Leu Ile Val Tyr Asp Cys Gln Lys Ser Asp
E--> 3093          13540              13545              13550
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        3094 Ala Gly Lys Tyr Thr Ile Thr Leu Lys Asn Val Ala Gly Thr Lys Glu
E--> 3095        13555           13560           13565
        3096 Gly Thr Ile Ser Ile Lys Val Val Gly Lys Pro Gly Ile Pro Thr Gly
E--> 3097        13570           13575           13580
        3098 Pro Ile Lys Phe Asp Glu Val Thr Ala Glu Ala Met Thr Leu Lys Trp
E--> 3099 13585           13590           13595           13600
        3100 Ala Pro Pro Lys Asp Asp Gly Gly Ser Glu Ile Thr Asn Tyr Ile Leu
E--> 3101        13605           13610           13615
        3102 Glu Lys Arg Asp Ser Val Asn Asn Lys Trp Val Thr Cys Ala Ser Ala
E--> 3103        13620           13625           13630
        3104 Val Gln Lys Thr Thr Phe Arg Val Thr Arg Leu His Glu Gly Met Glu
E--> 3105        13635           13640           13645
        3106 Tyr Thr Phe Arg Val Ser Ala Glu Asn Lys Tyr Gly Val Gly Glu Gly
E--> 3107        13650           13655           13660
        3108 Leu Lys Ser Glu Pro Ile Val Ala Arg His Pro Phe Asp Val Pro Asp
E--> 3109 13665           13670           13675           13680
        3110 Ala Pro Pro Pro Pro Asn Ile Val Asp Val Arg His Asp Ser Val Ser
E--> 3111        13685           13690           13695
        3112 Leu Thr Trp Thr Asp Pro Lys Lys Thr Gly Gly Ser Pro Ile Thr Gly
E--> 3113        13700           13705           13710
        3114 Tyr His Leu Glu Phe Lys Glu Arg Asn Ser Leu Leu Trp Lys Arg Ala
E--> 3115        13715           13720           13725
        3116 Asn Lys Thr Pro Ile Arg Met Arg Asp Phe Lys Val Thr Gly Leu Thr
E--> 3117        13730           13735           13740
        3118 Glu Gly Leu Glu Tyr Glu Phe Arg Val Met Ala Ile Asn Leu Ala Gly
E--> 3119 13745           13750           13755           13760
        3120 Val Gly Lys Pro Ser Leu Pro Ser Glu Pro Val Val Ala Leu Asp Pro
E--> 3121        13765           13770           13775
        3122 Ile Asp Pro Pro Gly Lys Pro Glu Val Ile Asn Ile Thr Arg Asn Ser
E--> 3123        13780           13785           13790
        3124 Val Thr Leu Ile Trp Thr Glu Pro Lys Tyr Asp Gly Gly His Lys Leu
E--> 3125        13795           13800           13805
        3126 Thr Gly Tyr Ile Val Glu Lys Arg Asp Leu Pro Ser Lys Ser Trp Met
E--> 3127        13810           13815           13820
        3128 Lys Ala Asn His Val Asn Val Pro Glu Cys Ala Phe Thr Val Thr Asp
E--> 3129 13825           13830           13835           13840
        3130 Leu Val Glu Gly Gly Lys Tyr Glu Phe Arg Ile Arg Ala Lys Asn Thr
E--> 3131        13845           13850           13855
        3132 Ala Gly Ala Ile Ser Ala Pro Ser Glu Ser Thr Glu Thr Ile Ile Cys
E--> 3133        13860           13865           13870
        3134 Lys Asp Glu Tyr Glu Ala Pro Thr Ile Val Leu Asp Pro Thr Ile Lys
E--> 3135        13875           13880           13885
        3136 Asp Gly Leu Thr Ile Lys Ala Gly Asp Thr Ile Val Leu Asn Ala Ile
E--> 3137        13890           13895           13900
        3138 Ser Ile Leu Gly Lys Pro Leu Pro Lys Ser Ser Trp Ser Lys Ala Gly
E--> 3139 13905           13910           13915           13920
        3140 Lys Asp Ile Arg Pro Ser Asp Ile Thr Gln Ile Thr Ser Thr Pro Thr
E--> 3141        13925           13930           13935
        3142 Ser Ser Met Leu Thr Ile Lys Tyr Ala Thr Arg Lys Asp Ala Gly Glu
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E--> 3143                13940              13945               13950
     3144 Tyr Thr Ile Thr Ala Thr Asn Pro Phe Gly Thr Lys Val Glu His Val
E--> 3145           13955              13960            13965
     3146 Lys Val Thr Val Leu Asp Val Pro Gly Pro Pro Gly Pro Val Glu Ile
E--> 3147      13970              13975              13980
     3148 Ser Asn Val Ser Ala Glu Lys Ala Thr Leu Thr Trp Thr Pro Pro Leu
E--> 3149 13985              13990              13995            14000
     3150 Glu Asp Gly Gly Ser Pro Ile Lys Ser Tyr Ile Leu Glu Lys Arg Glu
E--> 3151           14005              14010            14015
     3152 Thr Ser Arg Leu Leu Trp Thr Val Val Ser Glu Asp Ile Gln Ser Cys
E--> 3153           14020              14025            14030
     3154 Arg His Val Ala Thr Lys Leu Ile Gln Gly Asn Glu Tyr Ile Phe Arg
E--> 3155        14035              14040              14045
     3156 Val Ser Ala Val Asn His Tyr Gly Lys Gly Glu Pro Val Gln Ser Glu
E--> 3157      14050              14055              14060
     3158 Pro Val Lys Met Val Asp Arg Phe Gly Pro Pro Gly Pro Pro Glu Lys
E--> 3159 14065              14070              14075            14080
     3160 Pro Glu Val Ser Asn Val Thr Lys Asn Thr Ala Thr Val Ser Trp Lys
E--> 3161           14085              14090            14095
     3162 Arg Pro Val Asp Asp Gly Gly Ser Glu Ile Thr Gly Tyr His Val Glu
E--> 3163           14100              14105            14110
     3164 Arg Arg Glu Lys Lys Ser Leu Arg Trp Val Arg Ala Ile Lys Thr Pro
E--> 3165        14115              14120              14125
     3166 Val Ser Asp Leu Arg Cys Lys Val Thr Gly Leu Gln Glu Gly Ser Thr
E--> 3167      14130              14135              14140
     3168 Tyr Glu Phe Arg Val Ser Ala Glu Asn Arg Ala Gly Ile Gly Pro Pro
E--> 3169 14145              14150              14155            14160
     3170 Ser Glu Ala Ser Asp Ser Val Leu Met Lys Asp Ala Ala Tyr Pro Pro
E--> 3171           14165              14170            14175
     3172 Gly Pro Pro Ser Asn Pro His Val Thr Asp Thr Thr Lys Lys Ser Ala
E--> 3173           14180              14185            14190
     3174 Ser Leu Ala Trp Gly Lys Pro His Tyr Asp Gly Gly Leu Glu Ile Thr
E--> 3175        14195              14200              14205
     3176 Gly Tyr Val Val Glu His Gln Lys Val Gly Asp Glu Ala Trp Ile Lys
E--> 3177      14210              14215              14220
     3178 Asp Thr Thr Gly Thr Ala Leu Arg Ile Thr Gln Phe Val Val Pro Asp
E--> 3179 14225              14230              14235            14240
     3180 Leu Gln Thr Lys Glu Lys Tyr Asn Phe Arg Ile Ser Ala Ile Asn Asp
E--> 3181           14245              14250            14255
     3182 Ala Gly Val Gly Glu Pro Ala Val Ile Pro Asp Val Glu Ile Val Glu
E--> 3183           14260              14265            14270
     3184 Arg Glu Met Ala Pro Asp Phe Glu Leu Asp Ala Glu Leu Arg Arg Thr
E--> 3185        14275              14280              14285
     3186 Leu Val Val Arg Ala Gly Leu Ser Ile Arg Ile Phe Val Pro Ile Lys
E--> 3187      14290              14295              14300
     3188 Gly Arg Pro Ala Pro Glu Val Thr Trp Thr Lys Asp Asn Ile Asn Leu
E--> 3189 14305              14310              14315            14320
     3190 Lys Asn Arg Ala Asn Ile Glu Asn Thr Glu Ser Phe Thr Leu Leu Ile
E--> 3191        14325              14330              14335
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    3192 Ile Pro Glu Cys Asn Arg Tyr Asp Thr Gly Lys Phe Val Met Thr Ile
E--> 3193            14340           14345           14350
    3194 Glu Asn Pro Ala Gly Lys Lys Ser Gly Phe Val Asn Val Arg Val Leu
E--> 3195            14355           14360           14365
    3196 Asp Thr Pro Gly Pro Val Leu Asn Leu Arg Pro Thr Asp Ile Thr Lys
E--> 3197      14370           14375           14380
    3198 Asp Ser Val Thr Leu His Trp Asp Leu Pro Leu Ile Asp Gly Gly Ser
E--> 3199 14385           14390           14395           14400
    3200 Arg Ile Thr Asn Tyr Ile Val Glu Lys Arg Glu Ala Thr Arg Lys Ser
E--> 3201            14405           14410           14415
    3202 Tyr Ser Thr Ala Thr Thr Lys Cys His Lys Cys Thr Tyr Lys Val Thr
E--> 3203            14420           14425           14430
    3204 Gly Leu Ser Glu Gly Cys Glu Tyr Phe Phe Arg Val Met Ala Glu Asn
E--> 3205            14435           14440           14445
    3206 Glu Tyr Gly Ile Gly Glu Pro Thr Glu Thr Thr Glu Pro Val Lys Ala
E--> 3207            14450           14455           14460
    3208 Ser Glu Ala Pro Ser Pro Pro Asp Ser Leu Asn Ile Met Asp Ile Thr
E--> 3209 14465           14470           14475           14480
    3210 Lys Ser Thr Val Ser Leu Ala Trp Pro Lys Pro Lys His Asp Gly Gly
E--> 3211            14485           14490           14495
    3212 Ser Lys Ile Thr Gly Tyr Val Ile Glu Ala Gln Arg Lys Gly Ser Asp
E--> 3213            14500           14505           14510
    3214 Gln Trp Thr His Ile Thr Thr Val Lys Gly Leu Glu Cys Val Val Arg
E--> 3215            14515           14520           14525
    3216 Asn Leu Thr Glu Gly Glu Glu Tyr Thr Phe Gln Val Met Ala Val Asn
E--> 3217            14530           14535           14540
    3218 Ser Ala Gly Arg Ser Ala Pro Arg Glu Ser Arg Pro Val Ile Val Lys
E--> 3219 14545           14550           14555           14560
    3220 Glu Gln Thr Met Leu Pro Glu Leu Asp Leu Arg Gly Ile Tyr Gln Lys
E--> 3221            14565           14570           14575
    3222 Leu Val Ile Ala Lys Ala Gly Asp Asn Ile Lys Val Glu Ile Pro Val
E--> 3223            14580           14585           14590
    3224 Leu Gly Arg Pro Lys Pro Thr Val Thr Trp Lys Lys Gly Asp Gln Ile
E--> 3225            14595           14600           14605
    3226 Leu Lys Gln Thr Gln Arg Val Asn Phe Glu Thr Thr Ala Thr Ser Thr
E--> 3227            14610            14615           14620
    3228 Ile Leu Asn Ile Asn Glu Cys Val Arg Ser Asp Ser Gly Pro Tyr Pro
E--> 3229 14625           14630           14635           14640
    3230 Leu Thr Ala Arg Asn Ile Val Gly Glu Val Gly Asp Val Ile Thr Ile
E--> 3231            14645           14650           14655
    3232 Gln Val His Asp Ile Pro Gly Pro Pro Thr Gly Pro Ile Lys Phe Asp
E--> 3233            14660           14665           14670
    3234 Glu Val Ser Ser Asp Phe Val Thr Phe Ser Trp Asp Pro Pro Glu Asn
E--> 3235            14675           14680           14685
    3236 Asp Gly Gly Val Pro Ile Ser Asn Tyr Val Val Glu Met Arg Gln Thr
E--> 3237            14690           14695           14700
    3238 Asp Ser Thr Thr Trp Val Glu Leu Ala Thr Thr Val Ile Arg Thr Thr
E--> 3239 14705           14710           14715           14720
    3240 Tyr Lys Ala Thr Arg Leu Thr Thr Gly Leu Glu Tyr Gln Phe Arg Val
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         Input Set : A:\00786.381002.SEQLIST.TXT
         Output Set: C:\CRF3\05302001\I759508A.raw

E--> 3241    .              14725              14730              14735
     3242 Lys Ala Gln Asn Arg Tyr Gly Val Gly Pro Gly Ile Thr Ser Ala Trp
E--> 3243              14740              14745              14750
     3244 Ile Val Ala Asn Tyr Pro Phe Lys Val Pro Gly Pro Pro Gly Thr Pro
E--> 3245         14755              14760              14765
     3246 Gln Val Thr Ala Val Thr Lys Asp Ser Met Thr Ile Ser Trp His Glu
E--> 3247    14770              14775              14780
     3248 Pro Leu Ser Asp Gly Gly Ser Pro Ile Leu Gly Tyr His Val Glu Arg
E--> 3249 14785              14790              14795              14800
     3250 Lys Glu Arg Asn Gly Ile Leu Trp Gln Thr Val Ser Lys Ala Leu Val
E--> 3251              14805              14810              14815
     3252 Pro Gly Asn Ile Phe Lys Ser Ser Gly Leu Thr Asp Gly Ile Ala Tyr
E--> 3253              14820              14825              14830
     3254 Glu Phe Arg Val Ile Ala Glu Asn Met Ala Gly Lys Ser Lys Pro Ser
E--> 3255    ,         14835              14840              14845
     3256 Lys Pro Ser Glu Pro Met Leu Ala Leu Asp Pro Ile Asp Pro Pro Gly
E--> 3257    14850              14855              14860
     3258 Lys Pro Val Pro Leu Asn Ile Thr Arg His Thr Val Thr Leu Lys Trp
E--> 3259 14865              14870              14875              14880
     3260 Ala Lys Pro Glu Tyr Thr Gly Gly Phe Lys Ile Thr Ser Tyr Ile Val
E--> 3261              14885              14890              14895
     3262 Glu Lys Arg Asp Leu Pro Asn Gly Arg Trp Leu Lys Ala Asn Phe Ser
E--> 3263              14900              14905              14910
     3264 Asn Ile Leu Glu Asn Glu Phe Thr Val Ser Gly Leu Thr Glu Asp Ala
E--> 3265              14915              14920              14925
     3266 Ala Tyr Glu Phe Arg Val Ile Ala Lys Asn Ala Ala Gly Ala Ile Ser
E--> 3267    14930              14935              14940
     3268 Pro Pro Ser Glu Pro Ser Asp Ala Ile Thr Cys Arg Asp Asp Val Glu
E--> 3269 14945              14950              14955              14960
     3270 Ala Pro Lys Ile Lys Val Asp Val Lys Phe Lys Asp Thr Val Ile Leu
E--> 3271              14965              14970              14975
     3272 Lys Ala Gly Glu Ala Phe Arg Leu Glu Ala Asp Val Ser Gly Arg Pro
E--> 3273              14980              14985              14990
     3274 Pro Pro Thr Met Glu Trp Ser Lys Asp Gly Lys Glu Leu Glu Gly Thr
E--> 3275         14995              15000              15005
     3276 Ala Lys Leu Glu Ile Lys Ile Ala Asp Phe Ser Thr Asn Leu Val Asn
E--> 3277    15010              15015              15020
     3278 Lys Asp Ser Thr Arg Arg Asp Ser Gly Ala Tyr Thr Leu Thr Ala Thr
E--> 3279 15025              15030              15035              15040
     3280 Asn Pro Gly Gly Phe Ala Lys His Ile Phe Asn Val Lys Val Leu Asp
E--> 3281              15045              15050              15055
     3282 Arg Pro Gly Pro Pro Glu Gly Pro Leu Ala Val Thr Glu Val Thr Ser
E--> 3283              15060              15065              15070
     3284 Glu Lys Cys Val Leu Ser Trp Phe Pro Pro Leu Asp Asp Gly Gly Ala
E--> 3285         15075              15080              15085
     3286 Lys Ile Asp His Tyr Ile Val Gln Lys Arg Glu Thr Ser Arg Leu Ala
E--> 3287    15090              15095              15100
     3288 Trp Thr Asn Val Ala Ser Glu Val Gln Val Thr Lys Leu Lys Val Thr  ·
E--> 3289 15105              15110              15115              15120
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       3290 Lys Leu Leu Lys Gly Asn Glu Tyr Ile Phe Arg Val Met Ala Val Asn
E--> 3291           15125           15130           15135
       3292 Lys Tyr Gly Val Gly Glu Pro Leu Glu Ser Glu Pro Val Leu Ala Val
E--> 3293           15140           15145           15150
       3294 Asn Pro Tyr Gly Pro Pro Asp Pro Pro Lys Asn Pro Glu Val Thr Thr
E--> 3295           15155           15160           15165
       3296 Ile Thr Lys Asp Ser Met Val Val Cys Trp Gly His Pro Asp Ser Asp
E--> 3297     15170           15175           15180
       3298 Gly Gly Ser Glu Ile Ile Asn Tyr Ile Val Glu Arg Arg Asp Lys Ala
E--> 3299 15185           15190           15195           15200
       3300 Gly Gln Arg Trp Ile Lys Cys Asn Lys Lys Thr Leu Thr Asp Leu Arg
E--> 3301           15205           15210           15215
       3302 Tyr Lys Val Ser Gly Leu Thr Glu Gly His Glu Tyr Glu Phe Arg Ile
E--> 3303           15220           15225           15230
       3304 Met Ala Glu Asn Ala Ala Gly Ile Ser Ala Pro Ser Pro Thr Ser Pro
E--> 3305           15235           15240           15245
       3306 Phe Tyr Lys Ala Cys Asp Thr Val Phe Lys Pro Gly Pro Pro Gly Asn
E--> 3307     15250           15255           15260
       3308 Pro Arg Val Leu Asp Thr Ser Arg Ser Ser Ile Ser Ile Ala Trp Asn
E--> 3309 15265           15270           15275           15280
       3310 Lys Pro Ile Tyr Asp Gly Gly Ser Glu Ile Thr Gly Tyr Met Val Glu
E--> 3311           15285           15290           15295
       3312 Ile Ala Leu Pro Glu Glu Asp Glu Trp Gln Ile Val Thr Pro Pro Ala
E--> 3313           15300           15305           15310
       3314 Gly Leu Lys Ala Thr Ser Tyr Thr Ile Thr Gly Leu Thr Glu Asn Gln
E--> 3315           15315           15320           15325
       3316 Glu Tyr Lys Ile Arg Ile Tyr Ala Met Asn Ser Glu Gly Leu Gly Glu
E--> 3317           15330           15335           15340
       3318 Pro Ala Leu Val Pro Gly Thr Pro Lys Ala Glu Asp Arg Met Leu Pro
E--> 3319 15345           15350           15355           15360
       3320 Pro Glu Ile Glu Leu Asp Ala Asp Leu Arg Lys Val Val Thr Ile Arg
E--> 3321           15365           15370           15375
       3322 Ala Cys Cys Thr Leu Arg Leu Phe Val Pro Ile Lys Gly Arg Pro Asp
E--> 3323           15380           15385           15390
       3324 Pro Glu Val Lys Trp Ala Arg Asp His Gly Glu Ser Leu Asp Lys Ala
E--> 3325           15395           15400           15405
       3326 Ser Ile Glu Ser Ala Ser Ser Tyr Thr Leu Leu Ile Val Gly Asn Val
E--> 3327           15410           15415           15420
       3328 Asn Arg Phe Asp Ser Gly Lys Tyr Ile Leu Thr Val Glu Asn Ser Ser
E--> 3329 15425           15430           15435           15440
       3330 Gly Ser Lys Ser Ala Phe Val Asn Val Arg Val Leu Asp Thr Pro Gly
E--> 3331           15445           15450           15455
       3332 Pro Pro Gln Asp Leu Lys Val Lys Glu Val Thr Lys Thr Ser Val Thr
E--> 3333           15460           15465           15470
       3334 Leu Thr Trp Asp Pro Pro Leu Leu Asp Gly Gly Ser Lys Ile Lys Asn
E--> 3335           15475           15480           15485
       3336 Tyr Ile Val Glu Lys Arg Glu Ser Thr Arg Lys Ala Tyr Ser Thr Val
E--> 3337           15490           15495           15500
       3338 Ala Thr Asn Cys His Lys Thr Ser Trp Lys Val Asp Gln Leu Gln Glu
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E--> 3339 15505              15510              15515              15520
     3340 Gly Cys Ser Tyr Tyr Phe Arg Val Leu Ala Glu Asn Glu Tyr Gly Ile
E--> 3341              15525              15530              15535
     3342 Gly Leu Pro Ala Glu Thr Ala Glu Ser Val Lys Ala Ser Glu Arg Pro
E--> 3343         15540              15545              15550
     3344 Leu Pro Pro Gly Lys Ile Thr Leu Met Asp Val Thr Arg Asn Ser Val
E--> 3345         15555              15560              15565
     3346 Ser Leu Ser Trp Glu Lys Pro Glu His Asp Gly Gly Ser Arg Ile Leu
E--> 3347    15570              15575              15580
     3348 Gly Tyr Ile Val Glu Met Gln Thr Lys Gly Ser Asp Lys Trp Ala Thr
E--> 3349 15585              15590              15595              15600
     3350 Cys Ala Thr Val Lys Val Thr Glu Ala Thr Ile Thr Gly Leu Ile Gln
E--> 3351              15605              15610              15615
     3352 Gly Glu Glu Tyr Ser Phe Arg Val Ser Ala Gln Asn Glu Lys Gly Ile
E--> 3353         15620              15625              15630
     3354 Ser Asp Pro Arg Gln Leu Ser Val Pro Val Ile Ala Lys Asp Leu Val
E--> 3355    15635              15640              15645
     3356 Ile Pro Pro Ala Phe Lys Leu Leu Phe Asn Thr Phe Thr Val Leu Ala
E--> 3357    15650              15655              15660
     3358 Gly Glu Asp Leu Lys Val Asp Val Pro Phe Ile Gly Arg Pro Thr Pro
E--> 3359 15665              15670              15675              15680
     3360 Ala Val Thr Trp His Lys Asp Asn Val Pro Leu Lys Gln Thr Thr Arg
E--> 3361              15685              15690              15695
     3362 Val Asn Ala Glu Ser Thr Glu Asn Asn Ser Leu Leu Thr Ile Lys Asp
E--> 3363         15700              15705              15710
     3364 Ala Cys Arg Glu Asp Val Gly His Tyr Val Val Lys Leu Thr Asn Ser
E--> 3365    15715              15720              15725
     3366 Ala Gly Glu Ala Ile Glu Thr Leu Asn Val Ile Val Leu Asp Lys Pro
E--> 3367    15730              15735              15740
     3368 Gly Pro Pro Thr Gly Pro Val Lys Met Asp Glu Val Thr Ala Asp Ser
E--> 3369 15745              15750              15755              15760
     3370 Ile Thr Leu Ser Trp Gly Pro Pro Lys Tyr Asp Gly Gly Ser Ser Ile
E--> 3371              15765              15770              15775
     3372 Asn Asn Tyr Ile Val Glu Lys Arg Asp Thr Ser Thr Thr Thr Trp Gln
E--> 3373         15780              15785              15790
     3374 Ile Val Ser Ala Thr Val Ala Arg Thr Thr Ile Lys Ala Cys Arg Leu
E--> 3375    15795              15800              15805
     3376 Lys Thr Gly Cys Glu Tyr Gln Phe Arg Ile Ala Ala Glu Asn Arg Tyr
E--> 3377    15810              15815              15820
     3378 Gly Lys Ser Thr Tyr Leu Asn Ser Glu Pro Thr Val Ala Gln Tyr Pro
E--> 3379 15825              15830              15835              15840
     3380 Phe Lys Val Pro Gly Pro Pro Gly Thr Pro Val Val Thr Leu Ser Ser
E--> 3381              15845              15850              15855
     3382 Arg Asp Ser Met Glu Val Gln Trp Asn Glu Pro Ile Ser Asp Gly Gly
E--> 3383         15860              15865              15870
     3384 Ser Arg Val Ile Gly Tyr His Leu Glu Arg Lys Glu Arg Asn Ser Ile
E--> 3385    15875              15880              15885
     3386 Leu Trp Val Lys Leu Asn Lys Thr Pro Ile Pro Gln Thr Lys Phe Lys
E--> 3387    15890              15895              15900
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        3388 Thr Thr Gly Leu Glu Glu Gly Val Glu Tyr Glu Phe Arg Val Ser Ala
E--> 3389 15905           15910           15915           15920
        3390 Glu Asn Ile Val Gly Ile Gly Lys Pro Ser Lys Val Ser Glu Cys Tyr
E--> 3391           15925           15930           15935
        3392 Val Ala Arg Asp Pro Cys Asp Pro Pro Gly Arg Pro Glu Ala Ile Ile
E--> 3393           15940           15945           15950
        3394 Val Thr Arg Asn Ser Val Thr Leu Gln Trp Lys Lys Pro Thr Tyr Asp
E--> 3395           15955           15960           15965
        3396 Gly Gly Ser Lys Ile Thr Gly Tyr Ile Val Glu Lys Lys Glu Leu Pro
E--> 3397        15970           15975           15980
        3398 Glu Gly Arg Trp Met Lys Ala Ser Phe Thr Asn Ile Ile Asp Thr His
E--> 3399 15985           15990           15995           16000
        3400 Phe Glu Val Thr Gly Leu Val Glu Asp His Arg Tyr Glu Phe Arg Val
E--> 3401           16005           16010           16015
        3402 Ile Ala Arg Asn Ala Ala Gly Val Phe Ser Glu Pro Ser Glu Ser Thr
E--> 3403           16020           16025           16030
        3404 Gly Ala Ile Thr Ala Arg Asp Glu Val Asp Pro Pro Arg Ile Ser Met
E--> 3405           16035           16040           16045
        3406 Asp Pro Lys Tyr Lys Asp Thr Ile Val Val His Ala Gly Glu Ser Phe
E--> 3407        16050           16055           16060
        3408 Lys Val Asp Ala Asp Ile Tyr Gly Lys Pro Ile Pro Thr Ile Gln Trp
E--> 3409 16065           16070           16075           16080
        3410 Ile Lys Gly Asp Gln Glu Leu Ser Asn Thr Ala Arg Leu Glu Ile Lys
E--> 3411           16085           16090           16095
        3412 Ser Thr Asp Phe Ala Thr Ser Leu Ser Val Lys Asp Ala Val Arg Val
E--> 3413           16100           16105           16110
        3414 Asp Ser Gly Asn Tyr Ile Leu Lys Ala Lys Asn Val Ala Gly Glu Arg
E--> 3415           16115           16120           16125
        3416 Ser Val Thr Val Asn Val Lys Val Leu Asp Arg Pro Gly Pro Pro Glu
E--> 3417        16130           16135           16140
        3418 Gly Pro Val Val Ile Ser Gly Val Thr Ala Glu Lys Cys Thr Leu Ala
E--> 3419 16145           16150           16155           16160
        3420 Trp Lys Pro Pro Leu Gln Asp Gly Gly Ser Asp Ile Ile Asn Tyr Ile
E--> 3421           16165           16170           16175
        3422 Val Glu Arg Arg Glu Thr Ser Arg Leu Val Trp Thr Val Val Asp Ala
E--> 3423           16180           16185           16190
        3424 Asn Val Gln Thr Leu Ser Cys Lys Val Thr Lys Leu Leu Glu Gly Asn
E--> 3425           16195           16200           16205
        3426 Glu Tyr Thr Phe Arg Ile Met Ala Val Asn Lys Tyr Gly Val Gly Glu
E--> 3427           16210           16215           16220
        3428 Pro Leu Glu Ser Glu Pro Val Val Ala Lys Asn Pro Phe Val Val Pro
E--> 3429 16225           16230           16235           16240
        3430 Asp Ala Pro Lys Ala Pro Glu Val Thr Thr Val Thr Lys Asp Ser Met
E--> 3431           16245           16250           16255
        3432 Ile Val Val Trp Glu Arg Pro Ala Ser Asp Gly Gly Ser Glu Ile Leu
E--> 3433           16260           16265           16270
        3434 Gly Tyr Val Leu Glu Lys Arg Asp Lys Glu Gly Ile Arg Trp Thr Arg
E--> 3435           16275           16280           16285
        3436 Cys His Lys Arg Leu Ile Gly Glu Leu Arg Leu Arg Val Thr Gly Leu
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E--> 3437      16290              16295              16300
     3438 Ile Glu Asn His Asp Tyr Glu Phe Arg Val Ser Ala Glu Asn Ala Ala
E--> 3439 16305              16310              16315              16320
     3440 Gly Leu Ser Glu Pro Ser Pro Pro Ser Ala Tyr Gln Lys Ala Cys Asp
E--> 3441              16325              16330              16335
     3442 Pro Ile Tyr Lys Pro Gly Pro Pro Asn Asn Pro Lys Val Ile Asp Ile
E--> 3443              16340              16345              16350
     3444 Thr Arg Ser Ser Val Phe Leu Ser Trp Ser Lys Pro Ile Tyr Asp Gly
E--> 3445         16355              16360              16365
     3446 Gly Cys Glu Ile Gln Gly Tyr Ile Val Glu Lys Cys Asp Val Asn Val
E--> 3447      16370              16375              16380
     3448 Gly Glu Trp Thr Met Cys Thr Pro Pro Thr Gly Ile Asn Lys Thr Asn
E--> 3449 16385              16390              16395              16400
     3450 Ile Glu Val Glu Lys Leu Leu Glu Lys His Glu Tyr Asn Phe Arg Ile
E--> 3451              16405              16410              16415
     3452 Cys Ala Ile Asn Lys Ala Gly Val Gly Glu His Ala Asp Val Pro Gly
E--> 3453              16420              16425              16430
     3454 Pro Ile Ile Val Glu Glu Lys Leu Glu Ala Pro Asp Ile Asp Leu Asp
E--> 3455         16435              16440              16445
     3456 Leu Glu Leu Arg Lys Ile Ile Asn Ile Arg Ala Gly Gly Ser Leu Arg
E--> 3457      16450              16455              16460
     3458 Leu Phe Val Pro Ile Lys Gly Arg Pro Thr Pro Glu Val Lys Trp Gly
E--> 3459 16465              16470              16475              16480
     3460 Lys Val Asp Gly Glu Ile Arg Asp Ala Ala Ile Ile Asp Val Thr Ser
E--> 3461              16485              16490              16495
     3462 Ser Phe Thr Ser Leu Val Leu Asp Asn Val Asn Arg Tyr Asp Ser Gly
E--> 3463              16500              16505              16510
     3464 Lys Tyr Thr Leu Thr Leu Glu Asn Ser Ser Gly Thr Lys Ser Ala Phe
E--> 3465         16515              16520              16525
     3466 Val Thr Val Arg Val Leu Asp Thr Pro Ser Pro Pro Val Asn Leu Lys
E--> 3467      16530              16535              16540
     3468 Val Thr Glu Ile Thr Lys Asp Ser Val Ser Ile Thr Trp Glu Pro Pro
E--> 3469 16545              16550              16555              16560
     3470 Leu Leu Asp Gly Gly Ser Lys Ile Lys Asn Tyr Ile Val Glu Lys Arg
E--> 3471              16565              16570              16575
     3472 Glu Ala Thr Arg Lys Ser Tyr Ala Ala Val Val Thr Asn Cys His Lys
E--> 3473              16580              16585              16590
     3474 Asn Ser Trp Lys Ile Asp Gln Leu Gln Glu Gly Cys Ser Tyr Tyr Phe
E--> 3475         16595              16600              16605
     3476 Arg Val Thr Ala Glu Asn Glu Tyr Gly Ile Gly Leu Pro Ala Gln Thr
E--> 3477      16610              16615              16620
     3478 Ala Asp Pro Ile Lys Val Ala Glu Val Pro Gln Pro Pro Gly Lys Ile
E--> 3479 16625              16630              16635              16640
     3480 Thr Val Asp Asp Val Thr Arg Asn Ser Val Ser Leu Ser Trp Thr Lys
E--> 3481              16645              16650              16655
     3482 Pro Glu His Asp Gly Gly Ser Lys Ile Ile Gln Tyr Ile Val Glu Met
E--> 3483              16660              16665              16670
     3484 Gln Ala Lys His Ser Glu Lys Trp Ser Glu Cys Ala Arg Val Lys Ser
E--> 3485         16675              16680              16685
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        3486 Leu Gln Ala Val Ile Thr Asn Leu Thr Gln Gly Glu Glu Tyr Leu Phe
E--> 3487      16690             16695             16700
        3488 Arg Val Val Ala Val Asn Glu Lys Gly Arg Ser Asp Pro Arg Ser Leu
E--> 3489 16705             16710             16715             16720
        3490 Ala Val Pro Ile Val Ala Lys Asp Leu Val Ile Glu Pro Asp Val Lys
E--> 3491           16725             16730             16735
        3492 Pro Ala Phe Ser Ser Tyr Ser Val Gln Val Gly Gln Asp Leu Lys Ile
E--> 3493           16740             16745             16750
        3494 Glu Val Pro Ile Ser Gly Arg Pro Lys Pro Thr Ile Thr Trp Thr Lys
E--> 3495           16755             16760             16765
        3496 Asp Gly Leu Pro Leu Lys Gln Thr Thr Arg Ile Asn Val Thr Asp Ser
E--> 3497           16770             16775             16780
        3498 Leu Asp Leu Thr Thr Leu Ser Ile Lys Glu Thr His Lys Asp Asp Gly
E--> 3499 16785             16790             16795             16800
        3500 Gly Gln Tyr Gly Ile Thr Val Ala Asn Val Val Gly Gln Lys Thr Ala
E--> 3501           16805             16810             16815
        3502 Ser Ile Glu Ile Val Thr Leu Asp Lys Pro Asp Pro Pro Lys Gly Pro
E--> 3503           16820             16825             16830
        3504 Val Lys Phe Asp Asp Val Ser Ala Glu Ser Ile Thr Leu Ser Trp Asn
E--> 3505           16835             16840             16845
        3506 Pro Pro Leu Tyr Thr Gly Gly Cys Gln Ile Thr Asn Tyr Ile Val Gln
E--> 3507      16850             16855             16860
        3508 Lys Arg Asp Thr Thr Thr Thr Val Trp Asp Val Val Ser Ala Thr Val
E--> 3509 16865             16870             16875             16880
        3510 Ala Arg Thr Thr Leu Lys Val Thr Lys Leu Lys Thr Gly Thr Glu Tyr
E--> 3511           16885             16890             16895
        3512 Gln Phe Arg Ile Phe Ala Glu Asn Arg Tyr Gly Gln Ser Phe Ala Leu
E--> 3513      16900             16905             16910
        3514 Glu Ser Asp Pro Ile Val Ala Gln Tyr Pro Tyr Lys Glu Pro Gly Pro
E--> 3515      16915             16920             16925
        3516 Pro Gly Thr Pro Phe Ala Thr Ala Ile Ser Lys Asp Ser Met Val Ile
E--> 3517 16930             16935             16940
        3518 Gln Trp His Glu Pro Val Asn Asn Gly Gly Ser Pro Val Ile Gly Tyr
E--> 3519 16945             16950             16955             16960
        3520 His Leu Glu Arg Lys Glu Arg Asn Ser Ile Leu Trp Thr Lys Val Asn
E--> 3521           16965             16970             16975
        3522 Lys Thr Ile Ile His Asp Thr Gln Phe Lys Ala Gln Asn Leu Glu Glu
E--> 3523      16980             16985             16990
        3524 Gly Ile Glu Tyr Glu Phe Arg Val Tyr Ala Glu Asn Ile Val Gly Val
E--> 3525      16995             17000             17005
        3526 Gly Lys Ala Ser Lys Asn Ser Glu Cys Tyr Val Ala Arg Asp Pro Cys
E--> 3527      17010             17015             17020
        3528 Asp Pro Pro Gly Thr Pro Glu Pro Ile Met Val Lys Arg Asn Glu Ile
E--> 3529 17025             17030             17035             17040
        3530 Thr Leu Gln Trp Thr Lys Pro Val Tyr Asp Gly Gly Ser Met Ile Thr
E--> 3531           17045             17050             17055
        3532 Gly Tyr Ile Val Glu Lys Arg Asp Leu Pro Asp Gly Arg Trp Met Lys
E--> 3533      17060             17065             17070
        3534 Ala Ser Phe Thr Asn Val Ile Glu Thr Gln Phe Thr Val Ser Gly Leu
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E--> 3535          17075              17080              17085
     3536 Thr Glu Asp Gln Arg Tyr Glu Phe Arg Val Ile Ala Lys Asn Ala Ala
E--> 3537          17090              17095              17100
     3538 Gly Ala Ile Ser Lys Pro Ser Asp Ser Thr Gly Pro Ile Thr Ala Lys
E--> 3539 17105              17110              17115              17120
     3540 Asp Glu Val Glu Leu Pro Arg Ile Ser Met Asp Pro Lys Phe Arg Asp
E--> 3541          17125              17130              17135
     3542 Thr Ile Val Val Asn Ala Gly Glu Thr Phe Arg Leu Glu Ala Asp Val
E--> 3543          17140              17145              17150
     3544 His Gly Lys Pro Leu Pro Thr Ile Glu Trp Leu Arg Gly Asp Lys Glu
E--> 3545          17155              17160              17165
     3546 Ile Glu Glu Ser Ala Arg Cys Glu Ile Lys Asn Thr Asp Phe Lys Ala
E--> 3547          17170              17175              17180
     3548 Leu Leu Ile Val Lys Asp Ala Ile Arg Ile Asp Gly Gly Gln Tyr Ile
E--> 3549 17185              17190              17195              17200
     3550 Leu Arg Ala Ser Asn Val Ala Gly Ser Lys Ser Phe Pro Val Asn Val
E--> 3551          17205              17210              17215
     3552 Lys Val Leu Asp Arg Pro Gly Pro Pro Glu Gly Pro Val Gln Val Thr
E--> 3553          17220              17225              17230
     3554 Gly Val Thr Ser Glu Lys Cys Ser Leu Thr Trp Ser Pro Pro Leu Gln
E--> 3555          17235              17240              17245
     3556 Asp Gly Gly Ser Asp Ile Ser His Tyr Val Val Glu Lys Arg Glu Thr
E--> 3557          17250              17255              17260
     3558 Ser Arg Leu Ala Trp Thr Val Val Ala Ser Glu Val Val Thr Asn Ser
E--> 3559 17265              17270              17275              17280
     3560 Leu Lys Val Thr Lys Leu Leu Glu Gly Asn Glu Tyr Val Phe Arg Ile
E--> 3561          17285              17290              17295
     3562 Met Ala Val Asn Lys Tyr Gly Val Gly Glu Pro Leu Glu Ser Ala Pro
E--> 3563          17300              17305              17310
     3564 Val Leu Met Lys Asn Pro Phe Val Leu Pro Gly Pro Pro Lys Ser Leu
E--> 3565          17315              17320              17325
     3566 Glu Val Thr Asn Ile Ala Lys Asp Ser Met Thr Val Cys Trp Asn Arg
E--> 3567          17330              17335              17340
     3568 Pro Asp Ser Asp Gly Gly Ser Glu Ile Ile Gly Tyr Ile Val Glu Lys
E--> 3569 17345              17350              17355              17360
     3570 Arg Asp Arg Ser Gly Ile Arg Trp Ile Lys Cys Asn Lys Arg Arg Ile
E--> 3571          17365              17370              17375
     3572 Thr Asp Leu Arg Leu Arg Val Thr Gly Leu Thr Glu Asp His Glu Tyr
E--> 3573          17380              17385              17390
     3574 Glu Phe Arg Val Ser Ala Glu Asn Ala Ala Gly Val Gly Glu Pro Ser
E--> 3575          17395              17400              17405
     3576 Pro Ala Thr Val Tyr Tyr Lys Ala Cys Asp Pro Val Phe Lys Pro Gly
E--> 3577          17410              17415              17420
     3578 Pro Pro Thr Asn Ala His Ile Val Asp Thr Thr Lys Asn Ser Ile Thr
E--> 3579 17425              17430              17435              17440
     3580 Leu Ala Trp Gly Lys Pro Ile Tyr Asp Gly Gly Ser Glu Ile Leu Gly
E--> 3581          17445              17450              17455
     3582 Tyr Val Val Glu Ile Cys Lys Ala Asp Glu Glu Glu Trp Gln Ile Val
E--> 3583          17460              17465              17470
```

RAW SEQUENCE LISTING   DATE: 05/30/2001
PATENT APPLICATION: US/09/759,508A   TIME: 11:49:02

Input Set : A:\00786.381002.SEQLIST.TXT
Output Set: C:\CRF3\05302001\I759508A.raw

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      3584 Thr Pro Gln Thr Gly Leu Arg Val Thr Arg Phe Glu Ile Ser Lys Leu
E--> 3585         17475             17480             17485
      3586 Thr Glu His Gln Glu Tyr Lys Ile Arg Val Cys Ala Leu Asn Lys Val
E--> 3587         17490             17495             17500
      3588 Gly Leu Gly Glu Ala Thr Ser Val Pro Gly Thr Val Lys Pro Glu Asp
E--> 3589 17505             17510             17515             17520
      3590 Lys Leu Glu Ala Pro Glu Leu Asp Leu Asp Ser Glu Leu Arg Lys Gly
E--> 3591             17525             17530             17535
      3592 Ile Val Val Arg Ala Gly Gly Ser Ala Arg Ile His Ile Pro Phe Lys
E--> 3593             17540             17545             17550
      3594 Gly Arg Pro Met Pro Glu Ile Thr Trp Ser Arg Glu Glu Gly Glu Phe
E--> 3595             17555             17560             17565
      3596 Thr Asp Lys Val Gln Ile Glu Lys Gly Val Asn Tyr Thr Gln Leu Ser
E--> 3597         17570             17575             17580
      3598 Ile Asp Asn Cys Asp Arg Asn Asp Ala Gly Lys Tyr Ile Leu Lys Leu
E--> 3599 17585             17590             17595             17600
      3600 Glu Asn Ser Ser Gly Ser Lys Ser Ala Phe Val Thr Val Lys Val Leu
E--> 3601             17605             17610             17615
      3602 Asp Thr Pro Gly Pro Pro Gln Asn Leu Ala Val Lys Glu Val Arg Lys
E--> 3603             17620             17625             17630
      3604 Asp Ser Ala Phe Leu Val Trp Glu Pro Pro Ile Ile Asp Gly Gly Ala
E--> 3605             17635             17640             17645
      3606 Lys Val Lys Asn Tyr Val Ile Asp Lys Arg Glu Ser Thr Arg Lys Ala
E--> 3607         17650             17655             17660
      3608 Tyr Ala Asn Val Ser Ser Lys Cys Ser Lys Thr Ser Phe Lys Val Glu
E--> 3609 17665             17670             17675             17680
      3610 Asn Leu Thr Glu Gly Ala Ile Tyr Tyr Phe Arg Val Met Ala Glu Asn
E--> 3611             17685             17690             17695
      3612 Glu Phe Gly Val Gly Val Pro Val Glu Thr Val Asp Ala Val Lys Ala
E--> 3613             17700             17705             17710
      3614 Ala Glu Pro Pro Ser Pro Pro Gly Lys Val Thr Leu Thr Asp Val Ser
E--> 3615             17715             17720             17725
      3616 Gln Thr Ser Ala Ser Leu Met Trp Glu Lys Pro Glu His Asp Gly Gly
E--> 3617         17730             17735             17740
      3618 Ser Arg Val Leu Gly Tyr Val Val Glu Met Gln Pro Lys Gly Thr Glu
E--> 3619 17745             17750             17755             17760
      3620 Lys Trp Ser Ile Val Ala Glu Ser Lys Val Cys Asn Ala Val Val Thr
E--> 3621             17765             17770             17775
      3622 Gly Leu Ser Ser Gly Gln Glu Tyr Gln Phe Arg Val Lys Ala Tyr Asn
E--> 3623             17780             17785             17790
      3624 Glu Lys Gly Lys Ser Asp Pro Arg Val Leu Gly Val Pro Val Ile Ala
E--> 3625             17795             17800             17805
      3626 Lys Asp Leu Thr Ile Gln Pro Ser Leu Lys Leu Pro Phe Asn Thr Tyr
E--> 3627         17810             17815             17820
      3628 Ser Ile Gln Ala Gly Glu Asp Leu Lys Ile Glu Ile Pro Val Ile Gly
E--> 3629 17825             17830             17835             17840
      3630 Arg Pro Arg Pro Asn Ile Ser Trp Val Lys Asp Gly Glu Pro Leu Lys
E--> 3631             17845             17850             17855
      3632 Gln Thr Thr Arg Val Asn Val Glu Glu Thr Ala Thr Ser Thr Val Leu
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E--> 3633         17860           17865           17870
     3634 His Ile Lys Glu Gly Asn Lys Asp Asp Phe Gly Lys Tyr Thr Val Thr
E--> 3635         17875           17880           17885
     3636 Ala Thr Asn Ser Ala Gly Thr Ala Thr Glu Asn Leu Ser Val Ile Val
E--> 3637    17890           17895           17900
     3638 Leu Glu Lys Pro Gly Pro Pro Val Gly Pro Val Arg Phe Asp Glu Val
E--> 3639 17905           17910           17915           17920
     3640 Ser Ala Asp Phe Val Val Ile Ser Trp Glu Pro Pro Ala Tyr Thr Gly
E--> 3641              17925           17930           17935
     3642 Gly Cys Gln Ile Ser Asn Tyr Ile Val Glu Lys Arg Asp Thr Thr Thr
E--> 3643              17940           17945           17950
     3644 Thr Thr Trp His Met Val Ser Ala Thr Val Ala Arg Thr Thr Ile Lys
E--> 3645         17955           17960           17965
     3646 Ile Thr Lys Leu Lys Thr Gly Thr Glu Tyr Gln Phe Arg Ile Phe Ala
E--> 3647    17970           17975           17980
     3648 Glu Asn Arg Tyr Gly Lys Ser Ala Pro Leu Asp Ser Lys Ala Val Ile
E--> 3649 17985           17990           17995           18000
     3650 Val Gln Tyr Pro Phe Lys Glu Pro Gly Pro Pro Gly Thr Pro Phe Val
E--> 3651              18005           18010           18015
     3652 Thr Ser Ile Ser Lys Asp Gln Met Leu Val Gln Trp His Glu Pro Val
E--> 3653              18020           18025           18030
     3654 Asn Asp Gly Gly Thr Lys Ile Ile Gly Tyr His Leu Glu Gln Lys Glu
E--> 3655         18035           18040           18045
     3656 Lys Asn Ser Ile Leu Trp Val Lys Leu Asn Lys Thr Pro Ile Gln Asp
E--> 3657    18050           18055           18060
     3658 Thr Lys Phe Lys Thr Thr Gly Leu Asp Glu Gly Leu Glu Tyr Glu Phe
E--> 3659 18065           18070           18075           18080
     3660 Lys Val Ser Ala Glu Asn Ile Val Gly Ile Gly Lys Pro Ser Lys Val
E--> 3661              18085           18090           18095
     3662 Ser Glu Cys Phe Val Ala Arg Asp Pro Cys Asp Pro Pro Gly Arg Pro
E--> 3663    18100           18105           18110
     3664 Glu Ala Ile Val Ile Thr Arg Asn Asn Val Thr Leu Lys Trp Lys Lys
E--> 3665         18115           18120           18125
     3666 Pro Ala Tyr Asp Gly Gly Ser Lys Ile Thr Gly Tyr Ile Val Glu Lys
E--> 3667    18130           18135           18140
     3668 Lys Asp Leu Pro Asp Gly Arg Trp Met Lys Ala Ser Phe Thr Asn Val
E--> 3669 18145           18150           18155           18160
     3670 Leu Glu Thr Glu Phe Thr Val Ser Gly Leu Val Glu Asp Gln Arg Tyr
E--> 3671         18165           18170           18175
     3672 Glu Phe Arg Val Ile Ala Arg Asn Ala Ala Gly Asn Phe Ser Glu Pro
E--> 3673    18180           18185           18190
     3674 Ser Asp Ser Ser Gly Ala Ile Thr Ala Arg Asp Glu Ile Asp Ala Pro
E--> 3675    18195           18200           18205
     3676 Asn Ala Ser Leu Asp Pro Lys Tyr Lys Asp Val Ile Val Val His Ala
E--> 3677    18210           18215           18220
     3678 Gly Glu Thr Phe Val Leu Glu Ala Asp Ile Arg Gly Lys Pro Ile Pro
E--> 3679 18225           18230           18235           18240
     3680 Asp Val Val Trp Ser Lys Asp Gly Lys Glu Leu Glu Glu Thr Ala Ala
E--> 3681         18245           18250           18255
```

Input Set : A:\00786.381002.SEQLIST.TXT
Output Set: C:\CRF3\05302001\I759508A.raw

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        3682 Arg Met Glu Ile Lys Ser Thr Ile Gln Lys Thr Thr Leu Val Val Lys
E--> 3683          18260               18265               18270
        3684 Asp Cys Ile Arg Thr Asp Gly Gly Gln Tyr Ile Leu Lys Leu Ser Asn
E--> 3685          18275               18280               18285
        3686 Val Gly Gly Thr Lys Ser Ile Pro Ile Thr Val Lys Val Leu Asp Arg
E--> 3687          18290               18295               18300
        3688 Pro Gly Ser Pro Glu Gly Pro Leu Lys Val Thr Gly Val Thr Ala Glu
E--> 3689 18305               18310               18315               18320
        3690 Lys Cys Tyr Leu Ala Trp Asn Pro Pro Leu Gln Asp Gly Gly Ala Asn
E--> 3691          18325               18330               18335
        3692 Ile Ser His Tyr Ile Ile Glu Lys Arg Glu Thr Ser Arg Leu Ser Trp
E--> 3693          18340               18345               18350
        3694 Thr Gln Val Ser Thr Glu Val Gln Ala Leu Asn Tyr Lys Val Thr Lys
E--> 3695          18355               18360               18365
        3696 Leu Leu Pro Gly Asn Glu Tyr Ile Phe Arg Val Met Ala Val Asn Lys
E--> 3697          18370               18375               18380
        3698 Tyr Gly Ile Gly Glu Pro Leu Glu Ser Gly Pro Val Thr Ala Cys Asn
E--> 3699 18385               18390               18395               18400
        3700 Pro Tyr Lys Pro Pro Gly Pro Pro Ser Thr Pro Glu Val Ser Ala Ile
E--> 3701          18405               18410               18415
        3702 Thr Lys Asp Ser Met Val Val Thr Trp Ala Arg Pro Val Asp Asp Gly
E--> 3703          18420               18425               18430
        3704 Gly Thr Glu Ile Glu Gly Tyr Ile Leu Glu Lys Arg Asp Lys Glu Gly
E--> 3705          18435               18440               18445
        3706 Val Arg Trp Thr Lys Cys Asn Lys Lys Thr Leu Thr Asp Leu Arg Leu
E--> 3707          18450               18455               18460
        3708 Arg Val Thr Gly Leu Thr Glu Gly His Ser Tyr Glu Phe Arg Val Ala
E--> 3709 18465               18470               18475               18480
        3710 Ala Glu Asn Ala Ala Gly Val Gly Glu Pro Ser Glu Pro Ser Val Phe
E--> 3711          18485               18490               18495
        3712 Tyr Arg Ala Cys Asp Ala Leu Tyr Pro Pro Gly Pro Pro Ser Asn Pro
E--> 3713          18500               18505               18510
        3714 Lys Val Thr Asp Thr Ser Arg Ser Ser Val Ser Leu Ala Trp Ser Lys
E--> 3715          18515               18520               18525
        3716 Pro Ile Tyr Asp Gly Gly Ala Pro Val Lys Gly Tyr Val Val Glu Val
E--> 3717          18530               18535               18540
        3718 Lys Glu Ala Ala Ala Asp Glu Trp Thr Thr Cys Thr Pro Pro Thr Gly
E--> 3719 18545               18550               18555               18560
        3720 Leu Gln Gly Lys Gln Phe Thr Val Thr Lys Leu Lys Glu Asn Thr Glu
E--> 3721          18565               18570               18575
        3722 Tyr Asn Phe Arg Ile Cys Ala Ile Asn Ser Glu Gly Val Gly Glu Pro
E--> 3723          18580               18585               18590
        3724 Ala Thr Leu Pro Gly Ser Val Val Ala Gln Glu Arg Ile Glu Pro Pro
E--> 3725          18595               18600               18605
        3726 Glu Ile Glu Leu Asp Ala Asp Leu Arg Lys Val Val Val Leu Arg Ala
E--> 3727          18610               18615               18620
        3728 Ser Ala Thr Leu Arg Leu Phe Val Thr Ile Lys Gly Arg Pro Glu Pro
E--> 3729 18625               18630               18635               18640
        3730 Glu Val Lys Trp Glu Lys Ala Glu Gly Ile Leu Thr Asp Arg Ala Gln
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E--> 3731                18645                18650                18655
     3732 Ile Glu Val Thr Ser Ser Phe Thr Met Leu Val Ile Asp Asn Val Thr
E--> 3733                18660                18665                18670
     3734 Arg Phe Asp Ser Gly Arg Tyr Asn Leu Thr Leu Glu Asn Asn Ser Gly
E--> 3735                18675                18680                18685
     3736 Ser Lys Thr Ala Phe Val Asn Val Arg Val Leu Asp Ser Pro Ser Ala
E--> 3737                18690                18695                18700
     3738 Pro Val Asn Leu Thr Ile Arg Glu Val Lys Lys Asp Ser Val Thr Leu
E--> 3739 18705                18710                18715                18720
     3740 Ser Trp Glu Pro Pro Leu Ile Asp Gly Gly Ala Lys Ile Thr Asn Tyr
E--> 3741                18725                18730                18735
     3742 Ile Val Glu Lys Arg Glu Thr Thr Arg Lys Ala Tyr Ala Thr Ile Thr
E--> 3743                18740                18745                18750
     3744 Asn Asn Cys Thr Lys Thr Thr Phe Arg Ile Glu Asn Leu Gln Glu Gly
E--> 3745                18755                18760                18765
     3746 Cys Ser Tyr Tyr Phe Arg Val Leu Ala Ser Asn Glu Tyr Gly Ile Gly
E--> 3747                18770                18775                18780
     3748 Leu Pro Ala Glu Thr Thr Glu Pro Val Lys Val Ser Glu Pro Pro Leu
E--> 3749 18785                18790                18795                18800
     3750 Pro Pro Gly Arg Val Thr Leu Val Asp Val Thr Arg Asn Thr Ala Thr
E--> 3751                18805                18810                18815
     3752 Ile Lys Trp Glu Lys Pro Glu Ser Asp Gly Gly Ser Lys Ile Thr Gly
E--> 3753                18820                18825                18830
     3754 Tyr Val Val Glu Met Gln Thr Lys Gly Ser Glu Lys Trp Ser Thr Cys
E--> 3755                18835                18840                18845
     3756 Thr Gln Val Lys Thr Leu Glu Ala Thr Ile Ser Gly Leu Thr Ala Gly
E--> 3757                18850                18855                18860
     3758 Glu Glu Tyr Val Phe Arg Val Ala Ala Val Asn Glu Lys Gly Arg Ser
E--> 3759 18865                18870                18875                18880
     3760 Asp Pro Arg Gln Leu Gly Val Pro Val Ile Ala Arg Asp Ile Glu Ile
E--> 3761                18885                18890                18895
     3762 Lys Pro Ser Val Glu Leu Pro Phe His Thr Phe Asn Val Lys Ala Arg
E--> 3763                18900                18905                18910
     3764 Glu Gln Leu Lys Ile Asp Val Pro Phe Lys Gly Arg Pro Gln Ala Thr
E--> 3765                18915                18920                18925
     3766 Val Asn Trp Arg Lys Asp Gly Gln Thr Leu Lys Glu Thr Thr Arg Val
E--> 3767                18930                18935                18940
     3768 Asn Val Ser Ser Ser Lys Thr Val Thr Ser Leu Ser Ile Lys Glu Ala
E--> 3769 18945                18950                18955                18960
     3770 Ser Lys Glu Asp Val Gly Thr Tyr Glu Leu Cys Val Ser Asn Ser Ala
E--> 3771                18965                18970                18975
     3772 Gly Ser Ile Thr Val Pro Ile Thr Ile Ile Val Leu Asp Arg Pro Gly
E--> 3773                18980                18985                18990
     3774 Pro Pro Gly Pro Ile Arg Ile Asp Glu Val Ser Cys Asp Ser Ile Thr
E--> 3775                18995                19000                19005
     3776 Ile Ser Trp Asn Pro Pro Glu Tyr Asp Gly Gly Cys Gln Ile Ser Asn
E--> 3777                19010                19015                19020
     3778 Tyr Ile Val Glu Lys Lys Glu Thr Thr Ser Thr Thr Trp His Ile Val
E--> 3779 19025                19030                19035                19040
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         3780 Ser Gln Ala Val Ala Arg Thr Ser Ile Lys Ile Val Arg Leu Thr Thr
E--> 3781              19045              19050              19055
         3782 Gly Ser Glu Tyr Gln Phe Arg Val Cys Ala Glu Asn Arg Tyr Gly Lys
E--> 3783              19060              19065              19070
         3784 Ser Ser Tyr Ser Glu Ser Ser Ala Val Val Ala Glu Tyr Pro Phe Ser
E--> 3785         19075              19080              19085
         3786 Pro Pro Gly Pro Pro Gly Thr Pro Lys Val Val His Ala Thr Lys Ser
E--> 3787         19090              19095              19100
         3788 Thr Met Leu Val Thr Trp Gln Val Pro Val Asn Asp Gly Gly Ser Arg
E--> 3789 19105              19110              19115              19120
         3790 Val Ile Gly Tyr His Leu Glu Tyr Lys Glu Arg Ser Ser Ile Leu Trp
E--> 3791              19125              19130              19135
         3792 Ser Lys Ala Asn Lys Ile Leu Ile Ala Asp Thr Gln Val Lys Val Ser
E--> 3793              19140              19145              19150
         3794 Gly Leu Asp Glu Gly Leu Met Tyr Glu Tyr Arg Val Tyr Ala Glu Asn
E--> 3795         19155              19160              19165
         3796 Ile Ala Gly Ile Gly Lys Cys Ser Lys Ser Cys Glu Pro Val Pro Ala
E--> 3797         19170              19175              19180
         3798 Arg Asp Pro Cys Asp Pro Pro Gly Gln Pro Glu Val Thr Asn Ile Thr
E--> 3799 19185              19190              19195              19200
         3800 Arg Lys Ser Val Ser Leu Lys Trp Ser Lys Pro His Tyr Asp Gly Gly
E--> 3801              19205              19210              19215
         3802 Ala Lys Ile Thr Gly Tyr Ile Val Glu Arg Arg Glu Leu Pro Asp Gly
E--> 3803         19220              19225              19230
         3804 Arg Trp Leu Lys Cys Asn Tyr Thr Asn Ile Gln Glu Thr Tyr Phe Glu
E--> 3805         19235              19240              19245
         3806 Val Thr Glu Leu Thr Glu Asp Gln Arg Tyr Glu Phe Arg Val Phe Ala
E--> 3807         19250              19255              19260
         3808 Arg Asn Ala Ala Asp Ser Val Ser Glu Pro Ser Glu Ser Thr Gly Pro
E--> 3809 19265              19270              19275              19280
         3810 Ile Ile Val Lys Asp Asp Val Glu Pro Pro Arg Val Met Met Asp Val
E--> 3811              19285              19290              19295
         3812 Lys Phe Arg Asp Val Ile Val Val Lys Ala Gly Glu Val Leu Lys Ile
E--> 3813         19300              19305              19310
         3814 Asn Ala Asp Ile Ala Gly Arg Pro Leu Pro Val Ile Ser Trp Ala Lys
E--> 3815         19315              19320              19325
         3816 Asp Gly Ile Glu Ile Glu Glu Arg Ala Arg Thr Glu Ile Ile Ser Thr
E--> 3817         19330              19335              19340
         3818 Asp Asn His Thr Leu Leu Thr Val Lys Asp Cys Ile Arg Arg Asp Thr
E--> 3819 19345              19350              19355              19360
         3820 Gly Gln Tyr Val Leu Thr Leu Lys Asn Val Ala Gly Thr Arg Ser Val
E--> 3821              19365              19370              19375
         3822 Ala Val Asn Cys Lys Val Leu Asp Lys Pro Gly Pro Pro Ala Gly Pro
E--> 3823         19380              19385              19390
         3824 Leu Glu Ile Asn Gly Leu Thr Ala Glu Lys Cys Ser Leu Ser Trp Gly
E--> 3825         19395              19400              19405
         3826 Arg Pro Gln Glu Asp Gly Gly Ala Asp Ile Asp Tyr Tyr His Arg Lys
E--> 3827         19410              19415              19420
         3828 Lys Arg Glu Thr Ser His Leu Ala Trp Thr Ile Cys Glu Gly Glu Leu
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E--> 3829 19425                 19430              19435                    19440
     3830 Gln Met Thr Ser Cys Lys Val Thr Lys Leu Leu Lys Gly Asn Glu Tyr
E--> 3831                 19445              19450                    19455
     3832 Ile Phe Arg Val Thr Gly Val Asn Lys Tyr Gly Val Gly Glu Pro Leu
E--> 3833                 19460              19465                    19470
     3834 Glu Ser Val Ala Ile Lys Ala Leu Asp Pro Phe Thr Val Pro Ser Pro
E--> 3835                 19475              19480                    19485
     3836 Pro Thr Ser Leu Glu Ile Thr Ser Val Thr Lys Glu Ser Met Thr Leu
E--> 3837            19490              19495              19500
     3838 Cys Trp Ser Arg Pro Glu Ser Asp Gly Gly Ser Glu Ile Ser Gly Tyr
E--> 3839 19505              19510              19515                    19520
     3840 Ile Ile Glu Arg Arg Glu Lys Asn Ser Leu Arg Trp Val Arg Val Asn
E--> 3841                 19525              19530                    19535
     3842 Lys Lys Pro Val Tyr Asp Leu Arg Val Lys Ser Thr Gly Leu Arg Glu
E--> 3843                 19540              19545                    19550
     3844 Gly Cys Glu Tyr Glu Tyr Arg Val Tyr Ala Glu Asn Ala Ala Gly Leu
E--> 3845            19555              19560              19565
     3846 Ser Leu Pro Ser Glu Thr Ser Pro Leu Ile Arg Ala Glu Asp Pro Val
E--> 3847            19570              19575              19580
     3848 Phe Leu Pro Ser Pro Pro Ser Lys Pro Lys Ile Val Asp Ser Gly Lys
E--> 3849 19585              19590              19595                    19600
     3850 Thr Thr Ile Thr Ile Ala Trp Val Lys Pro Leu Phe Asp Gly Gly Ala
E--> 3851                 19605              19610                    19615
     3852 Pro Ile Thr Gly Tyr Thr Val Glu Tyr Lys Lys Ser Asp Asp Thr Asp
E--> 3853            19620              19625              19630
     3854 Trp Lys Thr Ser Ile Gln Ser Leu Arg Gly Thr Glu Tyr Thr Ile Ser
E--> 3855            19635              19640              19645
     3856 Gly Leu Thr Thr Gly Ala Glu Tyr Val Phe Arg Val Lys Ser Val Asn
E--> 3857            19650              19655              19660
     3858 Lys Val Gly Ala Ser Asp Pro Ser Asp Ser Ser Asp Pro Gln Ile Ala
E--> 3859 19665              19670              19675                    19680
     3860 Lys Glu Arg Glu Glu Glu Pro Leu Phe Asp Ile Asp Ser Glu Met Arg
E--> 3861                 19685              19690                    19695
     3862 Lys Thr Leu Ile Val Lys Ala Gly Ala Ser Phe Thr Met Thr Val Pro
E--> 3863            19700              19705              19710
     3864 Phe Arg Gly Arg Pro Val Pro Asn Val Leu Trp Ser Lys Pro Asp Thr
E--> 3865            19715              19720              19725
     3866 Asp Leu Arg Thr Arg Ala Tyr Val Asp Thr Thr Asp Ser Arg Thr Ser
E--> 3867            19730              19735              19740
     3868 Leu Thr Ile Glu Asn Ala Asn Arg Asn Asp Ser Gly Lys Tyr Thr Leu
E--> 3869 19745              19750              19755                    19760
     3870 Thr Ile Gln Asn Val Leu Ser Ala Ala Ser Leu Thr Leu Val Val Lys
E--> 3871                 19765              19770                    19775
     3872 Val Leu Asp Thr Pro Gly Pro Pro Thr Asn Ile Thr Val Gln Asp Val
E--> 3873            19780              19785              19790
     3874 Thr Lys Glu Ser Ala Val Leu Ser Trp Asp Val Pro Glu Asn Asp Gly
E--> 3875            19795              19800              19805
     3876 Gly Ala Pro Val Lys Asn Tyr His Ile Glu Lys Arg Glu Ala Ser Lys
E--> 3877            19810              19815              19820
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        3878 Lys Ala Trp Val Ser Val Thr Asn Asn Cys Asn Arg Leu Ser Tyr Lys
E--> 3879 19825              19830              19835              19840
        3880 Val Thr Asn Leu Gln Glu Gly Ala Ile Tyr Tyr Phe Arg Val Ser Gly
E--> 3881              19845              19850              19855
        3882 Glu Asn Glu Phe Gly Val Gly Ile Pro Ala Glu Thr Lys Glu Gly Val
E--> 3883              19860              19865              19870
        3884 Lys Ile Thr Glu Lys Pro Ser Pro Pro Glu Lys Leu Gly Val Thr Ser
E--> 3885              19875              19880              19885
        3886 Ile Ser Lys Asp Ser Val Ser Leu Thr Trp Leu Lys Pro Glu His Asp
E--> 3887              19890              19895              19900
        3888 Gly Gly Ser Arg Ile Val His Tyr Val Val Glu Ala Leu Glu Lys Gly
E--> 3889 19905              19910              19915              19920
        3890 Gln Lys Asn Trp Val Lys Cys Ala Val Ala Lys Ser Thr His His Val
E--> 3891              19925              19930              19935
        3892 Val Ser Gly Leu Arg Glu Asn Ser Glu Tyr Phe Phe Arg Val Phe Ala
E--> 3893              19940              19945              19950
        3894 Glu Asn Gln Ala Gly Leu Ser Asp Pro Arg Glu Leu Leu Leu Pro Val
E--> 3895              19955              19960              19965
        3896 Leu Ile Lys Glu Gln Leu Glu Pro Pro Glu Ile Asp Met Lys Asn Phe
E--> 3897              19970              19975              19980
        3898 Pro Ser His Thr Val Tyr Val Arg Ala Gly Ser Asn Leu Lys Val Asp
E--> 3899 19985              19990              19995              20000
        3900 Ile Pro Ile Ser Gly Lys Pro Leu Pro Lys Val Thr Leu Ser Arg Asp
E--> 3901              20005              20010              20015
        3902 Gly Val Pro Leu Lys Ala Thr Met Arg Phe Asn Thr Glu Ile Thr Ala
E--> 3903              20020              20025              20030
        3904 Glu Asn Leu Thr Ile Asn Leu Lys Glu Ser Val Thr Ala Asp Ala Gly
E--> 3905              20035              20040              20045
        3906 Arg Tyr Glu Ile Thr Ala Ala Asn Ser Ser Gly Thr Thr Lys Ala Phe
E--> 3907 20050              20055              20060
        3908 Ile Asn Ile Val Val Leu Asp Arg Pro Gly Pro Pro Thr Gly Pro Val
E--> 3909 20065              20070              20075              20080
        3910 Val Ile Ser Asp Ile Thr Glu Glu Ser Val Thr Leu Lys Trp Glu Pro
E--> 3911              20085              20090              20095
        3912 Pro Lys Tyr Asp Gly Gly Ser Gln Val Thr Asn Tyr Ile Leu Leu Lys
E--> 3913              20100              20105              20110
        3914 Arg Glu Thr Ser Thr Ala Val Trp Thr Glu Val Ser Ala Thr Val Ala
E--> 3915              20115              20120              20125
        3916 Arg Thr Met Met Lys Val Met Lys Leu Thr Thr Gly Glu Glu Tyr Gln
E--> 3917              20130              20135              20140
        3918 Phe Arg Ile Lys Ala Glu Asn Arg Phe Gly Ile Ser Asp His Ile Asp
E--> 3919 20145              20150              20155              20160
        3920 Ser Ala Cys Val Thr Val Lys Leu Pro Tyr Thr Thr Pro Gly Pro Pro
E--> 3921              20165              20170              20175
        3922 Ser Thr Pro Trp Val Thr Asn Val Thr Arg Glu Ser Ile Thr Val Gly
E--> 3923              20180              20185              20190
        3924 Trp His Glu Pro Val Ser Asn Gly Gly Ser Ala Val Val Gly Tyr His
E--> 3925              20195              20200              20205
        3926 Leu Glu Met Lys Asp Arg Asn Ser Ile Leu Trp Gln Lys Ala Asn Lys
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E--> 3927      20210              20215              20220
     3928 Leu Val Ile Arg Thr Thr His Phe Lys Val Thr Thr Ile Ser Ala Gly
E--> 3929 20225              20230              20235              20240
     3930 Leu Ile Tyr Glu Phe Arg Val Tyr Ala Glu Asn Ala Ala Gly Val Gly
E--> 3931          20245              20250              20255
     3932 Lys Pro Ser His Pro Ser Glu Pro Val Leu Ala Ile Asp Ala Cys Glu
E--> 3933          20260              20265              20270
     3934 Pro Pro Arg Asn Val Arg Ile Thr Asp Ile Ser Lys Asn Ser Val Ser
E--> 3935          20275              20280              20285
     3936 Leu Ser Trp Gln Gln Pro Ala Phe Asp Gly Gly Ser Lys Ile Thr Gly
E--> 3937          20290              20295              20300
     3938 Tyr Ile Val Glu Arg Arg Asp Leu Pro Asp Gly Arg Trp Thr Lys Ala
E--> 3939 20305          20310              20315              20320
     3940 Ser Phe Thr Asn Val Thr Glu Thr Gln Phe Thr Ile Ser Gly Leu Thr
E--> 3941          20325              20330              20335
     3942 Gln Asn Ser Gln Tyr Glu Phe Arg Val Phe Ala Arg Asn Ala Val Gly
E--> 3943          20340              20345              20350
     3944 Ser Ile Ser Asn Pro Ser Glu Val Val Gly Pro Ile Thr Cys Ile Asp
E--> 3945          20355              20360              20365
     3946 Ser Tyr Gly Gly Pro Val Ile Asp Leu Pro Leu Glu Tyr Thr Glu Val
E--> 3947          20370              20375              20380
     3948 Val Lys Tyr Arg Ala Gly Thr Ser Val Lys Leu Arg Ala Gly Ile Ser
E--> 3949 20385              20390              20395              20400
     3950 Gly Lys Pro Ala Pro Thr Ile Glu Trp Tyr Lys Asp Asp Lys Glu Leu
E--> 3951          20405              20410              20415
     3952 Gln Thr Asn Ala Leu Val Cys Val Glu Asn Thr Thr Asp Leu Ala Ser
E--> 3953          20420              20425              20430
     3954 Ile Leu Ile Lys Asp Ala Asp Arg Leu Asn Ser Gly Cys Tyr Glu Leu
E--> 3955          20435              20440              20445
     3956 Lys Leu Arg Asn Ala Met Ala Ser Ala Ser Ala Thr Ile Arg Val Gln
E--> 3957          20450              20455              20460
     3958 Ile Leu Asp Lys Pro Gly Pro Pro Gly Gly Pro Ile Glu Phe Lys Thr
E--> 3959 20465              20470              20475              20480
     3960 Val Thr Ala Glu Lys Ile Thr Leu Leu Trp Arg Pro Pro Ala Asp Asp
E--> 3961          20485              20490              20495
     3962 Gly Gly Ala Lys Ile Thr His Tyr Ile Val Glu Lys Arg Glu Thr Ser
E--> 3963          20500              20505              20510
     3964 Arg Val Val Trp Ser Met Val Ser Glu His Leu Glu Glu Cys Ile Ile
E--> 3965          20515              20520              20525
     3966 Thr Thr Thr Lys Ile Ile Lys Gly Asn Glu Tyr Ile Phe Arg Val Arg
E--> 3967          20530              20535              20540
     3968 Ala Val Asn Lys Tyr Gly Ile Gly Glu Pro Leu Glu Ser Asp Ser Val
E--> 3969 20545              20550              20555              20560
     3970 Val Ala Lys Asn Ala Phe Val Thr Pro Gly Pro Pro Gly Ile Pro Glu
E--> 3971          20565              20570              20575
     3972 Val Thr Lys Ile Thr Lys Asn Ser Met Thr Val Val Trp Ser Arg Pro
E--> 3973          20580              20585              20590
     3974 Ile Ala Asp Gly Gly Ser Asp Ile Ser Gly Tyr Phe Leu Glu Lys Arg
E--> 3975          20595              20600              20605
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      3976 Asp Lys Lys Ser Leu Gly Trp Phe Lys Val Leu Lys Glu Thr Ile Arg
E--> 3977      20610               20615               20620
      3978 Asp Thr Arg Gln Lys Val Thr Gly Leu Thr Glu Asn Ser Asp Tyr Gln
E--> 3979 20625               20630               20635               20640
      3980 Tyr Arg Val Cys Ala Val Asn Ala Ala Gly Gln Gly Pro Phe Ser Glu
E--> 3981          20645               20650               20655
      3982 Pro Ser Glu Phe Tyr Lys Ala Ala Asp Pro Ile Asp Pro Pro Gly Pro
E--> 3983          20660               20665           20670
      3984 Pro Ala Lys Ile Arg Ile Ala Asp Ser Thr Lys Ser Ser Ile Thr Leu
E--> 3985          20675               20680               20685
      3986 Gly Trp Ser Lys Pro Val Tyr Asp Gly Gly Ser Ala Val Thr Gly Tyr
E--> 3987          20690           20695               20700
      3988 Val Val Glu Ile Arg Gln Gly Glu Glu Glu Glu Trp Thr Thr Val Ser
E--> 3989 20705               20710               20715               20720
      3990 Thr Lys Gly Glu Val Arg Thr Thr Glu Tyr Val Val Ser Asn Leu Lys
E--> 3991          20725               20730               20735
      3992 Pro Gly Val Asn Tyr Tyr Phe Arg Val Ser Ala Val Asn Cys Ala Gly
E--> 3993          20740               20745               20750
      3994 Gln Gly Glu Pro Ile Glu Met Asn Glu Pro Val Gln Ala Lys Asp Ile
E--> 3995          20755               20760               20765
      3996 Leu Glu Ala Pro Glu Ile Asp Leu Asp Val Ala Leu Arg Thr Ser Val
E--> 3997          20770               20775               20780
      3998 Ile Ala Lys Ala Gly Glu Asp Val Gln Val Leu Ile Pro Phe Lys Gly
E--> 3999 20785               20790               20795               20800
      4000 Arg Pro Pro Pro Thr Val Thr Trp Arg Lys Asp Glu Lys Asn Leu Gly
E--> 4001          20805               20810               20815
      4002 Ser Asp Ala Arg Tyr Ser Ile Glu Asn Thr Asp Ser Ser Ser Leu Leu
E--> 4003          20820               20825               20830
      4004 Thr Ile Pro Gln Val Thr Arg Asn Asp Thr Gly Lys Tyr Ile Leu Thr
E--> 4005          20835               20840               20845
      4006 Ile Glu Asn Gly Val Gly Glu Pro Lys Ser Ser Thr Val Ser Val Lys
E--> 4007          20850               20855               20860
      4008 Val Leu Asp Thr Pro Ala Ala Cys Gln Lys Leu Gln Val Lys His Val
E--> 4009 20865               20870               20875               20880
      4010 Ser Arg Gly Thr Val Thr Leu Leu Trp Asp Pro Pro Leu Ile Asp Gly
E--> 4011          20885               20890               20895
      4012 Gly Ser Pro Ile Ile Asn Tyr Val Ile Glu Lys Arg Asp Ala Thr Lys
E--> 4013          20900               20905               20910
      4014 Arg Thr Trp Ser Val Val Ser His Lys Cys Ser Ser Thr Ser Phe Lys
E--> 4015          20915               20920               20925
      4016 Leu Ile Asp Leu Ser Glu Lys Thr Pro Phe Phe Phe Arg Val Leu Ala
E--> 4017          20930               20935               20940
      4018 Glu Asn Glu Ile Gly Ile Gly Glu Pro Cys Glu Thr Thr Glu Pro Val
E--> 4019 20945               20950               20955               20960
      4020 Lys Ala Ala Glu Val Pro Ala Pro Ile Arg Asp Leu Ser Met Lys Asp
E--> 4021          20965               20970               20975
      4022 Ser Thr Lys Thr Ser Val Ile Leu Ser Trp Thr Lys Pro Asp Phe Asp
E--> 4023          20980               20985               20990
      4024 Gly Gly Ser Val Ile Thr Glu Tyr Val Val Glu Arg Lys Gly Lys Gly
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E--> 4025          20995              21000              21005
     4026 Glu Gln Thr Trp Ser His Ala Gly Ile Ser Lys Thr Cys Glu Ile Glu
E--> 4027          21010              21015              21020
     4028 Val Ser Gln Leu Lys Glu Gln Ser Val Leu Glu Phe Arg Val Phe Ala
E--> 4029 21025             21030              21035              21040
     4030 Lys Asn Glu Lys Gly Leu Ser Asp Pro Val Thr Ile Gly Pro Ile Thr
E--> 4031          21045              21050              21055
     4032 Val Lys Glu Leu Ile Ile Thr Pro Glu Val Asp Leu Ser Asp Ile Pro
E--> 4033          21060              21065              21070
     4034 Gly Ala Gln Val Thr Val Arg Ile Gly His Asn Val His Leu Glu Leu
E--> 4035          21075              21080              21085
     4036 Pro Tyr Lys Gly Lys Pro Lys Pro Ser Ile Ser Trp Leu Lys Asp Gly
E--> 4037          21090              21095              21100
     4038 Leu Pro Leu Lys Glu Ser Glu Phe Val Arg Phe Ser Lys Thr Glu Asn
E--> 4039 21105             21110              21115              21120
     4040 Lys Ile Thr Leu Ser Ile Lys Asn Ala Lys Lys Glu His Gly Gly Lys
E--> 4041          21125              21130              21135
     4042 Tyr Thr Val Ile Leu Asp Asn Ala Val Cys Arg Ile Ala Val Pro Ile
E--> 4043          21140              21145              21150
     4044 Thr Val Ile Thr Leu Gly Pro Pro Ser Lys Pro Lys Gly Pro Ile Arg
E--> 4045          21155              21160              21165
     4046 Phe Asp Glu Ile Lys Ala Asp Ser Val Ile Leu Ser Trp Asp Val Pro
E--> 4047          21170              21175              21180
     4048 Glu Asp Asn Gly Gly Gly Glu Ile Thr Cys Tyr Ser Ile Glu Lys Arg
E--> 4049 21185             21190              21195              21200
     4050 Glu Thr Ser Gln Thr Asn Trp Lys Met Val Cys Ser Ser Val Ala Arg
E--> 4051          21205              21210              21215
     4052 Thr Thr Phe Lys Val Pro Asn Leu Val Lys Asp Ala Glu Tyr Gln Phe
E--> 4053          21220              21225              21230
     4054 Arg Val Arg Ala Glu Asn Arg Tyr Gly Val Ser Gln Pro Leu Val Ser
E--> 4055          21235              21240              21245
     4056 Ser Ile Ile Val Ala Lys His Gln Phe Arg Ile Pro Gly Pro Pro Gly
E--> 4057          21250              21255              21260
     4058 Lys Pro Val Ile Tyr Asn Val Thr Ser Asp Gly Met Ser Leu Thr Trp
E--> 4059 21265             21270              21275              21280
     4060 Asp Ala Pro Val Tyr Asp Gly Gly Ser Glu Val Thr Gly Phe His Val
E--> 4061          21285              21290              21295
     4062 Glu Lys Lys Glu Arg Asn Ser Ile Leu Trp Gln Lys Val Asn Thr Ser
E--> 4063          21300              21305              21310
     4064 Pro Ile Ser Gly Arg Glu Tyr Arg Ala Thr Gly Leu Val Glu Gly Leu
E--> 4065          21315              21320              21325
     4066 Asp Tyr Gln Phe Arg Val Tyr Ala Glu Asn Ser Ala Gly Leu Ser Ser
E--> 4067          21330              21335              21340
     4068 Pro Ser Asp Pro Ser Lys Phe Thr Leu Ala Val Ser Pro Val Asp Pro
E--> 4069 21345             21350              21355              21360
     4070 Pro Gly Thr Pro Asp Tyr Ile Asp Val Thr Arg Glu Thr Ile Thr Leu
E--> 4071          21365              21370              21375
     4072 Lys Trp Asn Pro Pro Leu Arg Asp Gly Gly Ser Lys Ile Val Gly Tyr
E--> 4073          21380              21385              21390
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       4074 Ser Ile Glu Lys Arg Gln Gly Asn Glu Arg Trp Val Arg Cys Asn Phe
E--> 4075      21395               21400               21405
       4076 Thr Asp Val Ser Glu Cys Gln Tyr Thr Val Thr Gly Leu Ser Pro Gly
E--> 4077      21410               21415               21420
       4078 Asp Arg Tyr Glu Phe Arg Ile Ile Ala Arg Asn Ala Val Gly Thr Ile
E--> 4079 21425               21430               21435               21440
       4080 Ser Pro Pro Ser Gln Ser Ser Gly Ile Ile Met Thr Arg Asp Glu Asn
E--> 4081           21445               21450               21455
       4082 Val Pro Pro Ile Val Glu Phe Gly Pro Glu Tyr Phe Asp Gly Leu Ile
E--> 4083           21460               21465               21470
       4084 Ile Lys Ser Gly Glu Ser Leu Arg Ile Lys Ala Leu Val Gln Gly Arg
E--> 4085           21475               21480               21485
       4086 Pro Val Pro Arg Val Thr Trp Phe Lys Asp Gly Val Glu Ile Glu Lys
E--> 4087           21490               21495               21500
       4088 Arg Met Asn Met Glu Ile Thr Asn Val Leu Gly Ser Thr Ser Leu Phe
E--> 4089 21505               21510               21515               21520
       4090 Val Arg Asp Ala Thr Arg Asp His Arg Gly Val Tyr Thr Val Glu Ala
E--> 4091           21525               21530               21535
       4092 Lys Asn Ala Ser Gly Ser Ala Lys Ala Glu Ile Lys Val Lys Val Gln
E--> 4093           21540               21545               21550
       4094 Asp Thr Pro Gly Lys Val Val Gly Pro Ile Arg Phe Thr Asn Ile Thr
E--> 4095           21555               21560               21565
       4096 Gly Glu Lys Met Thr Leu Trp Trp Asp Ala Pro Leu Asn Asp Gly Cys
E--> 4097           21570               21575               21580
       4098 Ala Pro Ile Thr His Tyr Ile Ile Glu Lys Arg Glu Thr Ser Arg Leu
E--> 4099 21585               21590               21595               21600
       4100 Ala Trp Ala Leu Ile Glu Asp Lys Cys Glu Ala Gln Ser Tyr Thr Ala
E--> 4101           21605               21610               21615
       4102 Ile Lys Leu Ile Asn Gly Asn Glu Tyr Gln Phe Arg Val Ser Ala Val
E--> 4103           21620               21625               21630
       4104 Asn Lys Phe Gly Val Gly Arg Pro Leu Asp Ser Asp Pro Val Val Ala
E--> 4105           21635               21640               21645
       4106 Gln Ile Gln Tyr Thr Val Pro Asp Ala Pro Gly Ile Pro Glu Pro Ser
E--> 4107           21650               21655               21660
       4108 Asn Ile Thr Gly Asn Ser Ile Thr Leu Thr Trp Ala Arg Pro Glu Ser
E--> 4109 21665               21670               21675               21680
       4110 Asp Gly Gly Ser Glu Ile Gln Gln Tyr Ile Leu Glu Arg Arg Glu Lys
E--> 4111           21685               21690               21695
       4112 Lys Ser Thr Arg Trp Val Lys Val Ile Ser Lys Arg Pro Ile Ser Glu
E--> 4113           21700               21705               21710
       4114 Thr Arg Phe Lys Val Thr Gly Leu Thr Glu Gly Asn Glu Tyr Glu Phe
E--> 4115           21715               21720               21725
       4116 His Val Met Ala Glu Asn Ala Ala Gly Val Gly Pro Ala Ser Gly Ile
E--> 4117           21730               21735               21740
       4118 Ser Arg Leu Ile Lys Cys Arg Glu Pro Val Asn Pro Pro Gly Pro Pro
E--> 4119 21745               21750               21755               21760
       4120 Thr Val Val Lys Val Thr Asp Thr Ser Lys Thr Thr Val Ser Leu Glu
E--> 4121           21765               21770               21775
       4122 Trp Ser Lys Pro Val Phe Asp Gly Gly Met Glu Ile Ile Gly Tyr Ile
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E--> 4123           21780              21785              21790
     4124 Ile Glu Met Cys Lys Thr Asp Leu Gly Asp Trp His Lys Val Asn Ala
E--> 4125           21795              21800              21805
     4126 Glu Ala Cys Val Lys Thr Arg Tyr Thr Val Thr Asp Leu Gln Ala Gly
E--> 4127      21810              21815              21820
     4128 Glu Glu Tyr Lys Phe Arg Val Ser Ala Ile Asn Gly Ala Gly Lys Gly
E--> 4129 21825           21830              21835              21840
     4130 Asp Ser Cys Glu Val Thr Gly Thr Ile Lys Ala Val Asp Arg Leu Thr
E--> 4131           21845              21850              21855
     4132 Ala Pro Glu Leu Asp Ile Asp Ala Asn Phe Lys Gln Thr His Val Val
E--> 4133           21860              21865              21870
     4134 Arg Ala Gly Ala Ser Ile Arg Leu Phe Ile Ala Tyr Gln Gly Arg Pro
E--> 4135      21875              21880              21885
     4136 Thr Pro Thr Ala Val Trp Ser Lys Pro Asp Ser Asn Leu Ser Leu Arg
E--> 4137      21890              21895              21900
     4138 Ala Asp Ile His Thr Thr Asp Ser Phe Ser Thr Leu Thr Val Glu Asn
E--> 4139 21905              21910              21915              21920
     4140 Cys Asn Arg Asn Asp Ala Gly Lys Tyr Thr Leu Thr Val Glu Asn Asn
E--> 4141           21925              21930              21935
     4142 Ser Gly Ser Lys Ser Ile Thr Phe Thr Val Lys Val Leu Asp Thr Pro
E--> 4143           21940              21945              21950
     4144 Gly Pro Pro Gly Pro Ile Thr Phe Lys Asp Val Thr Arg Gly Ser Ala
E--> 4145      21955              21960              21965
     4146 Thr Leu Met Trp Asp Ala Pro Leu Leu Asp Gly Gly Ala Arg Ile His
E--> 4147 21970              21975              21980
     4148 His Tyr Val Val Glu Lys Arg Glu Ala Ser Arg Arg Ser Trp Gln Val
E--> 4149 21985              21990              21995              22000
     4150 Ile Ser Glu Lys Cys Thr Arg Gln Ile Phe Lys Val Asn Asp Leu Ala
E--> 4151           22005              22010.             22015
     4152 Glu Gly Val Pro Tyr Tyr Phe Arg Val Ser Ala Val Asn Glu Tyr Gly
E--> 4153      22020              22025              22030
     4154 Val Gly Glu Pro Tyr Glu Met Pro Glu Pro Ile Val Ala Thr Glu Gln
E--> 4155      22035              22040              22045
     4156 Pro Ala Pro Pro Arg Arg Leu Asp Val Val Asp Thr Ser Lys Ser Ser
E--> 4157      22050              22055              22060
     4158 Ala Val Leu Ala Trp Leu Lys Pro Asp His Asp Gly Gly Ser Arg Ile
E--> 4159 22065              22070              22075              22080
     4160 Thr Gly Tyr Leu Leu Glu Met Arg Gln Lys Gly Ser Asp Leu Trp Val
E--> 4161           22085              22090              22095
     4162 Glu Ala Gly His Thr Lys Gln Leu Thr Phe Thr Val Glu Arg Leu Val
E--> 4163      22100              22105              22110
     4164 Glu Lys Thr Glu Tyr Glu Phe Arg Val Lys Ala Lys Asn Asp Ala Gly
E--> 4165      22115              22120              22125
     4166 Tyr Ser Glu Pro Arg Glu Ala Phe Ser Ser Val Ile Ile Lys Glu Pro
E--> 4167      22130              22135              22140
     4168 Gln Ile Glu Pro Thr Ala Asp Leu Thr Gly Ile Thr Asn Gln Leu Ile
E--> 4169 22145              22150              22155              22160
     4170 Thr Cys Lys Ala Gly Ser Pro Phe Thr Ile Asp Val Pro Ile Ser Gly
E--> 4171           22165              22170              22175
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        4172 Arg Pro Ala Pro Lys Val Thr Trp Lys Leu Glu Glu Met Arg Leu Lys
E--> 4173          22180              22185              22190
        4174 Glu Thr Asp Arg Val Ser Ile Thr Thr Thr Lys Asp Arg Thr Thr Leu
E--> 4175          22195              22200              22205
        4176 Thr Val Lys Asp Ser Met Arg Gly Asp Ser Gly Arg Tyr Phe Leu Thr
E--> 4177          22210              22215              22220
        4178 Leu Glu Asn Thr Ala Gly Val Lys Thr Phe Ser Val Thr Val Val Val
E--> 4179 22225              22230              22235              22240
        4180 Ile Gly Arg Pro Gly Pro Val Thr Gly Pro Ile Glu Val Ser Ser Val
E--> 4181          22245              22250              22255
        4182 Ser Ala Glu Ser Cys Val Leu Ser Trp Gly Glu Pro Lys Asp Gly Gly
E--> 4183          22260              22265              22270
        4184 Gly Thr Glu Ile Thr Asn Tyr Ile Val Glu Lys Arg Glu Ser Gly Thr
E--> 4185          22275              22280              22285
        4186 Thr Ala Trp Gln Leu Val Asn Ser Ser Val Lys Arg Thr Gln Ile Lys
E--> 4187          22290              22295              22300
        4188 Val Thr His Leu Thr Lys Tyr Met Glu Tyr Ser Phe Arg Val Ser Ser
E--> 4189 22305              22310              22315              22320
        4190 Glu Asn Arg Phe Gly Val Ser Lys Pro Leu Glu Ser Ala Pro Ile Ile
E--> 4191          22325              22330              22335
        4192 Ala Glu His Pro Phe Val Pro Pro Ser Ala Pro Thr Arg Pro Glu Val
E--> 4193          22340              22345              22350
        4194 Tyr His Val Ser Ala Asn Ala Met Ser Ile Arg Trp Glu Glu Pro Tyr
E--> 4195          22355              22360              22365
        4196 His Asp Gly Gly Ser Lys Ile Ile Gly Tyr Trp Val Glu Lys Lys Glu
E--> 4197          22370              22375              22380
        4198 Arg Asn Thr Ile Leu Trp Val Lys Glu Asn Lys Val Pro Cys Leu Glu
E--> 4199 22385              22390              22395              22400
        4200 Cys Asn Tyr Lys Val Thr Gly Leu Val Glu Gly Leu Glu Tyr Gln Phe
E--> 4201          22405              22410              22415
        4202 Arg Thr Tyr Ala Leu Asn Ala Ala Gly Val Ser Lys Ala Ser Glu Ala
E--> 4203          22420              22425              22430
        4204 Ser Arg Pro Ile Met Ala Gln Asn Pro Val Asp Ala Pro Gly Arg Pro
E--> 4205          22435              22440              22445
        4206 Glu Val Thr Asp Val Thr Arg Ser Thr Val Ser Leu Ile Trp Ser Ala
E--> 4207 22450              22455              22460
        4208 Pro Ala Tyr Asp Gly Gly Ser Lys Val Val Gly Tyr Ile Ile Glu Arg
E--> 4209 22465              22470              22475              22480
        4210 Lys Pro Val Ser Glu Val Gly Asp Gly Arg Trp Leu Lys Cys Asn Tyr
E--> 4211          22485              22490              22495
        4212 Thr Ile Val Ser Asp Asn Phe Phe Thr Val Thr Ala Leu Ser Glu Gly
E--> 4213          22500              22505              22510
        4214 Asp Thr Tyr Glu Phe Arg Val Leu Ala Lys Asn Ala Ala Gly Val Ile
E--> 4215          22515              22520              22525
        4216 Ser Lys Gly Ser Glu Ser Thr Gly Pro Val Thr Cys Arg Asp Glu Tyr
E--> 4217          22530              22535              22540
        4218 Ala Pro Pro Lys Ala Glu Leu Asp Ala Arg Leu His Gly Asp Leu Val
E--> 4219 22545              22550              22555              22560
        4220 Thr Ile Arg Ala Gly Ser Asp Leu Val Leu Asp Ala Ala Val Gly Gly
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E--> 4221              22565            22570            22575
     4222 Lys Pro Glu Pro Lys Ile Ile Trp Thr Lys Gly Asp Lys Glu Leu Asp
E--> 4223              22580            22585            22590
     4224 Leu Cys Glu Lys Val Ser Leu Gln Tyr Thr Gly Lys Arg Ala Thr Ala
E--> 4225              22595            22600            22605
     4226 Val Ile Lys Phe Cys Asp Arg Ser Asp Ser Gly Lys Tyr Thr Leu Thr
E--> 4227         22610            22615            22620
     4228 Val Lys Asn Ala Ser Gly Thr Lys Ala Val Ser Val Met Val Lys Val
E--> 4229 22625            22630            22635            22640
     4230 Leu Asp Ser Pro Gly Pro Cys Gly Lys Leu Thr Val Ser Arg Val Thr
E--> 4231              22645            22650            22655
     4232 Gln Glu Lys Cys Thr Leu Ala Trp Ser Leu Pro Gln Glu Asp Gly Gly
E--> 4233         22660            22665            22670
     4234 Ala Glu Ile Thr His Tyr Ile Val Glu Arg Arg Glu Thr Ser Arg Leu
E--> 4235         22675            22680            22685
     4236 Asn Trp Val Ile Val Glu Gly Glu Cys Pro Thr Leu Ser Tyr Val Val
E--> 4237         22690            22695            22700
     4238 Thr Arg Leu Ile Lys Asn Asn Glu Tyr Ile Phe Arg Val Arg Ala Val
E--> 4239 22705            22710            22715            22720
     4240 Asn Lys Tyr Gly Pro Gly Val Pro Val Glu Ser Glu Pro Ile Val Ala
E--> 4241              22725            22730            22735
     4242 Arg Asn Ser Phe Thr Ile Pro Ser Pro Pro Gly Ile Pro Glu Glu Val
E--> 4243         22740            22745            22750
     4244 Gly Thr Gly Lys Glu His Ile Ile Ile Gln Trp Thr Lys Pro Glu Ser
E--> 4245         22755            22760            22765
     4246 Asp Gly Gly Asn Glu Ile Ser Asn Tyr Leu Val Asp Lys Arg Glu Lys
E--> 4247         22770            22775            22780
     4248 Glu Ser Leu Arg Trp Thr Arg Val Asn Lys Asp Tyr Val Val Tyr Asp
E--> 4249 22785            22790            22795            22800
     4250 Thr Arg Leu Lys Val Thr Ser Leu Met Glu Gly Cys Asp Tyr Gln Phe
E--> 4251              22805            22810            22815
     4252 Arg Val Thr Ala Val Asn Ala Ala Gly Asn Ser Glu Pro Ser Glu Arg
E--> 4253         22820            22825            22830
     4254 Ser Asn Phe Ile Ser Cys Arg Glu Pro Ser Tyr Thr Pro Gly Pro Pro
E--> 4255         22835            22840            22845
     4256 Ser Ala Pro Arg Val Val Asp Thr Thr Lys His Ser Ile Ser Leu Ala
E--> 4257    22850            22855            22860
     4258 Trp Thr Lys Pro Met Tyr Asp Gly Gly Thr Asp Ile Val Gly Tyr Val
E--> 4259 22865            22870            22875            22880
     4260 Leu Glu Met Gln Glu Lys Asp Thr Asp Gln Trp Tyr Arg Val His Thr
E--> 4261              22885            22890            22895
     4262 Asn Ala Thr Ile Arg Asn Thr Glu Phe Thr Val Pro Asp Leu Lys Met
E--> 4263         22900            22905            22910
     4264 Gly Gln Lys Tyr Ser Phe Arg Val Ala Ala Val Asn Val Lys Gly Met
E--> 4265         22915            22920            22925
     4266 Ser Glu Tyr Ser Glu Ser Ile Ala Glu Ile Glu Pro Val Glu Arg Ile
E--> 4267    22930            22935            22940
     4268 Glu Ile Pro Asp Leu Glu Leu Ala Asp Asp Leu Lys Lys Thr Val Thr
E--> 4269 22945            22950            22955            22960
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Input Set : A:\00786.381002.SEQLIST.TXT
Output Set: C:\CRF3\05302001\I759508A.raw

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      4270 Ile Arg Ala Gly Ala Ser Leu Arg Leu Met Val Ser Val Ser Gly Arg
E--> 4271           22965           22970           22975
      4272 Pro Pro Pro Val Ile Thr Trp Ser Lys Gln Gly Ile Asp Leu Ala Ser
E--> 4273           22980           22985           22990
      4274 Arg Ala Ile Ile Asp Thr Thr Glu Ser Tyr Ser Leu Leu Ile Val Asp
E--> 4275           22995           23000           23005
      4276 Lys Val Asn Arg Tyr Asp Ala Gly Lys Tyr Thr Ile Glu Ala Glu Asn
E--> 4277      23010           23015           23020
      4278 Gln Ser Gly Lys Lys Ser Ala Thr Val Leu Val Lys Val Tyr Asp Thr
E--> 4279 23025           23030           23035           23040
      4280 Pro Gly Pro Cys Pro Ser Val Lys Val Lys Glu Val Ser Arg Asp Ser
E--> 4281           23045           23050           23055
      4282 Val Thr Ile Thr Trp Glu Ile Pro Thr Ile Asp Gly Gly Ala Pro Ile
E--> 4283           23060           23065           23070
      4284 Asn Asn Tyr Ile Val Glu Lys Arg Glu Ala Ala Met Arg Ala Phe Lys
E--> 4285      23075           23080           23085
      4286 Thr Val Thr Thr Lys Cys Ser Lys Thr Leu Tyr Arg Ile Ser Gly Leu
E--> 4287      23090           23095           23100
      4288 Val Glu Gly Thr Met His Tyr Phe Arg Val Leu Pro Glu Asn Ile Tyr
E--> 4289 23105           23110           23115           23120
      4290 Gly Ile Gly Glu Pro Cys Glu Thr Ser Asp Ala Val Leu Val Ser Glu
E--> 4291           23125           23130           23135
      4292 Val Pro Leu Val Pro Ala Lys Leu Glu Val Val Asp Val Thr Lys Ser
E--> 4293           23140           23145           23150
      4294 Thr Val Thr Leu Ala Trp Glu Lys Pro Leu Tyr Asp Gly Gly Ser Arg
E--> 4295      23155           23160           23165
      4296 Leu Thr Gly Tyr Val Leu Glu Ala Cys Lys Ala Gly Thr Glu Arg Trp
E--> 4297      23170           23175           23180
      4298 Met Lys Val Val Thr Leu Lys Pro Thr Val Leu Glu His Thr Val Thr
E--> 4299 23185           23190           23195           23200
      4300 Ser Leu Asn Glu Gly Glu Gln Tyr Leu Phe Arg Ile Arg Ala Gln Asn
E--> 4301           23205           23210           23215
      4302 Glu Lys Gly Val Ser Glu Pro Arg Glu Thr Val Thr Ala Val Thr Val
E--> 4303           23220           23225           23230
      4304 Gln Asp Leu Arg Val Leu Pro Thr Ile Asp Leu Ser Thr Met Pro Gln
E--> 4305      23235           23240           23245
      4306 Lys Thr Ile His Val Pro Ala Gly Arg Pro Val Glu Leu Val Ile Pro
E--> 4307      23250           23255          23260
      4308 Ile Ala Gly Arg Pro Pro Pro Ala Ala Ser Trp Phe Phe Ala Gly Ser
E--> 4309 23265           23270           23275           23280
      4310 Lys Leu Arg Glu Ser Glu Arg Val Thr Val Glu Thr His Thr Lys Val
E--> 4311           23285           23290           23295
      4312 Ala Lys Leu Thr Ile Arg Glu Thr Thr Ile Arg Asp Thr Gly Glu Tyr
E--> 4313           23300           23305           23310
      4314 Thr Leu Glu Leu Lys Asn Val Thr Gly Thr Thr Ser Glu Thr Ile Lys
E--> 4315      23315           23320           23325
      4316 Val Ile Ile Leu Asp Lys Pro Gly Pro Pro Thr Gly Pro Ile Lys Ile
E--> 4317      23330           23335           23340
      4318 Asp Glu Ile Asp Ala Thr Ser Ile Thr Ile Ser Trp Glu Pro Pro Glu
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E--> 4319 23345           23350           23355               23360
     4320 Leu Asp Gly Gly Ala Pro Leu Ser Gly Tyr Val Val Glu Gln Arg Asp
E--> 4321           23365           23370               23375
     4322 Ala His Arg Pro Gly Trp Leu Pro Val Ser Glu Ser Val Thr Arg Ser
E--> 4323           23380           23385               23390
     4324 Thr Phe Lys Phe Thr Arg Leu Thr Glu Gly Asn Glu Tyr Val Phe Arg
E--> 4325           23395           23400               23405
     4326 Val Ala Ala Thr Asn Arg Phe Gly Ile Gly Ser Tyr Leu Gln Ser Glu
E--> 4327      23410           23415           23420
     4328 Val Ile Glu Cys Arg Ser Ser Ile Arg Ile Pro Gly Pro Pro Glu Thr
E--> 4329 23425           23430           23435               23440
     4330 Leu Gln Ile Phe Asp Val Ser Arg Asp Gly Met Thr Leu Thr Trp Tyr
E--> 4331           23445           23450               23455
     4332 Pro Pro Glu Asp Asp Gly Gly Ser Gln Val Thr Gly Tyr Ile Val Glu
E--> 4333           23460           23465               23470
     4334 Arg Lys Glu Val Arg Ala Asp Arg Trp Val Arg Val Asn Lys Val Pro
E--> 4335      23475           23480           23485
     4336 Val Thr Met Thr Arg Tyr Arg Ser Thr Gly Leu Thr Glu Gly Leu Glu
E--> 4337      23490           23495           23500
     4338 Tyr Glu His Arg Val Thr Ala Ile Asn Ala Arg Gly Ser Gly Lys Pro
E--> 4339 23505           23510           23515               23520
     4340 Ser Arg Pro Ser Lys Pro Ile Val Ala Met Asp Pro Ile Ala Pro Pro
E--> 4341           23525           23530               23535
     4342 Gly Lys Pro Gln Asn Pro Arg Val Thr Asp Thr Thr Arg Thr Ser Val
E--> 4343           23540           23545               23550
     4344 Ser Leu Ala Trp Ser Val Pro Glu Asp Glu Gly Gly Ser Lys Val Thr
E--> 4345      23555           23560           23565
     4346 Gly Tyr Leu Ile Glu Met Gln Lys Val Asp Gln His Glu Trp Thr Lys
E--> 4347      23570           23575           23580
     4348 Cys Asn Thr Thr Pro Thr Lys Ile Arg Glu Tyr Thr Leu Thr His Leu
E--> 4349 23585           23590           23595               23600
     4350 Pro Gln Gly Ala Glu Tyr Arg Phe Arg Val Leu Ala Cys Asn Ala Gly
E--> 4351           23605           23610               23615
     4352 Gly Pro Gly Glu Pro Ala Glu Val Pro Gly Thr Val Lys Val Thr Glu
E--> 4353           23620           23625               23630
     4354 Met Leu Glu Tyr Pro Asp Tyr Glu Leu Asp Glu Arg Tyr Gln Glu Gly
E--> 4355      23635           23640           23645
     4356 Ile Phe Val Arg Gln Gly Gly Val Ile Arg Leu Thr Ile Pro Ile Lys
E--> 4357      23650           23655           23660
     4358 Gly Lys Pro Phe Pro Ile Cys Lys Trp Thr Lys Glu Gly Gln Asp Ile
E--> 4359 23665           23670           23675               23680
     4360 Ser Lys Arg Ala Met Ile Ala Thr Ser Glu Thr His Thr Glu Leu Val
E--> 4361           23685           23690               23695
     4362 Ile Lys Glu Ala Asp Arg Gly Asp Ser Gly Thr Tyr Asp Leu Val Leu
E--> 4363           23700           23705               23710
     4364 Glu Asn Lys Cys Gly Lys Lys Ala Val Tyr Ile Lys Val Arg Val Ile
E--> 4365      23715           23720           23725
     4366 Gly Ser Pro Asn Ser Pro Glu Gly Pro Leu Glu Tyr Asp Asp Ile Gln
E--> 4367      23730           23735           23740
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        4368 Val Arg Ser Val Arg Val Ser Trp Arg Pro Pro Ala Asp Asp Gly Gly
E--> 4369 23745          23750          23755          23760
        4370 Ala Asp Ile Leu Gly Tyr Ile Leu Glu Arg Arg Glu Val Pro Lys Ala
E--> 4371          23765          23770          23775
        4372 Ala Trp Tyr Thr Ile Asp Ser Arg Val Arg Gly Thr Ser Leu Val Val
E--> 4373          23780          23785          23790
        4374 Lys Gly Leu Lys Glu Asn Val Glu Tyr His Phe Arg Val Ser Ala Glu
E--> 4375          23795          23800          23805
        4376 Asn Gln Phe Gly Ile Ser Lys Pro Leu Lys Ser Glu Glu Pro Val Thr
E--> 4377          23810          23815          23820
        4378 Pro Lys Thr Pro Leu Asn Pro Pro Glu Pro Pro Ser Asn Pro Pro Glu
E--> 4379 23825          23830          23835          23840
        4380 Val Leu Asp Val Thr Lys Ser Ser Val Ser Leu Ser Trp Ser Arg Pro
E--> 4381          23845          23850          23855
        4382 Lys Asp Asp Gly Gly Ser Arg Val Thr Gly Tyr Tyr Ile Glu Arg Lys
E--> 4383          23860          23865          23870
        4384 Glu Thr Ser Thr Asp Lys Trp Val Arg His Asn Lys Thr Gln Ile Thr
E--> 4385          23875          23880          23885
        4386 Thr Thr Met Tyr Thr Val Thr Gly Leu Val Pro Asp Ala Glu Tyr Gln
E--> 4387          23890          23895          23900
        4388 Phe Arg Ile Ile Ala Gln Asn Asp Val Gly Leu Ser Glu Thr Ser Pro
E--> 4389 23905          23910          23915          23920
        4390 Ala Ser Glu Pro Val Val Cys Lys Asp Pro Phe Asp Lys Pro Ser Gln
E--> 4391          23925          23930          23935
        4392 Pro Gly Glu Leu Glu Ile Leu Ser Ile Ser Lys Asp Ser Val Thr Leu
E--> 4393          23940          23945          23950
        4394 Gln Trp Glu Lys Pro Glu Cys Asp Gly Gly Lys Glu Ile Leu Gly Tyr
E--> 4395          23955          23960          23965
        4396 Trp Val Glu Tyr Arg Gln Ser Gly Asp Ser Ala Trp Lys Lys Ser Asn
E--> 4397 23970          23975          23980
        4398 Lys Glu Arg Ile Lys Asp Lys Gln Phe Thr Ile Gly Gly Leu Leu Glu
E--> 4399 23985          23990          23995          24000
        4400 Ala Thr Glu Tyr Glu Phe Arg Val Phe Ala Glu Asn Glu Thr Gly Leu
E--> 4401          24005          24010          24015
        4402 Ser Arg Pro Arg Arg Thr Ala Met Ser Ile Lys Thr Lys Leu Thr Ser
E--> 4403          24020          24025          24030
        4404 Gly Glu Ala Pro Gly Ile Arg Lys Glu Met Lys Asp Val Thr Thr Lys
E--> 4405          24035          24040          24045
        4406 Leu Gly Glu Ala Ala Gln Leu Ser Cys Gln Ile Val Gly Arg Pro Leu
E--> 4407          24050          24055          24060
        4408 Pro Asp Ile Lys Trp Tyr Arg Phe Gly Lys Glu Leu Ile Gln Ser Arg
E--> 4409 24065          24070          24075          24080
        4410 Lys Tyr Lys Met Ser Ser Asp Gly Arg Thr His Thr Leu Thr Val Met
E--> 4411          24085          24090          24095
        4412 Thr Glu Glu Gln Glu Asp Glu Gly Val Tyr Thr Cys Ile Ala Thr Asn
E--> 4413          24100          24105          24110
        4414 Glu Val Gly Glu Val Glu Thr Ser Ser Lys Leu Leu Leu Gln Ala Thr
E--> 4415          24115          24120          24125
        4416 Pro Gln Phe His Pro Gly Tyr Pro Leu Lys Glu Lys Tyr Tyr Gly Ala
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E--> 4417      24130            24135            24140
     4418 Val Gly Ser Thr Leu Arg Leu His Val Met Tyr Ile Gly Arg Pro Val
E--> 4419 24145            24150            24155            24160
     4420 Pro Ala Met Thr Trp Phe His Gly Gln Lys Leu Leu Gln Asn Ser Glu
E--> 4421      24165            24170            24175
     4422 Asn Ile Thr Ile Glu Asn Thr Glu His Tyr Thr His Leu Val Met Lys
E--> 4423      24180            24185            24190
     4424 Asn Val Gln Arg Lys Thr His Ala Gly Lys Tyr Lys Val Gln Leu Ser
E--> 4425      24195            24200            24205
     4426 Asn Val Phe Gly Thr Val Asp Ala Ile Leu Asp Val Glu Ile Gln Asp
E--> 4427      24210            24215            24220
     4428 Lys Pro Asp Lys Pro Thr Gly Pro Ile Val Ile Glu Ala Leu Leu Lys
E--> 4429 24225            24230            24235            24240
     4430 Asn Ser Ala Val Ile Ser Trp Lys Pro Pro Ala Asp Asp Gly Gly Ser
E--> 4431      24245            24250            24255
     4432 Trp Ile Thr Asn Tyr Val Val Glu Lys Cys Glu Ala Lys Glu Gly Ala
E--> 4433      24260            24265            24270
     4434 Glu Trp Gln Leu Val Ser Ser Ala Ile Ser Val Thr Thr Cys Arg Ile
E--> 4435      24275            24280            24285
     4436 Val Asn Leu Thr Glu Asn Ala Gly Tyr Tyr Phe Arg Val Ser Ala Gln
E--> 4437      24290            24295            24300
     4438 Asn Thr Phe Gly Ile Ser Asp Pro Leu Glu Val Ser Ser Val Val Ile
E--> 4439 24305            24310            24315            24320
     4440 Ile Lys Ser Pro Phe Glu Lys Pro Gly Ala Pro Gly Lys Pro Thr Ile
E--> 4441      24325            24330            24335
     4442 Thr Ala Val Thr Lys Asp Ser Cys Val Val Ala Trp Lys Pro Pro Ala
E--> 4443      24340            24345            24350
     4444 Ser Asp Gly Gly Ala Lys Ile Arg Asn Tyr Tyr Leu Glu Lys Arg Glu
E--> 4445      24355            24360            24365
     4446 Lys Lys Gln Asn Lys Trp Ile Ser Val Thr Thr Glu Glu Ile Arg Glu
E--> 4447      24370            24375            24380
     4448 Thr Val Phe Ser Val Lys Asn Leu Ile Glu Gly Leu Glu Tyr Glu Phe
E--> 4449 24385            24390            24395            24400
     4450 Arg Val Lys Cys Glu Asn Leu Gly Gly Glu Ser Glu Trp Ser Glu Ile
E--> 4451      24405            24410            24415
     4452 Ser Glu Pro Ile Thr Pro Lys Ser Asp Val Pro Ile Gln Ala Pro His
E--> 4453      24420            24425            24430
     4454 Phe Lys Glu Glu Leu Arg Asn Leu Asn Val Arg Tyr Gln Ser Asn Ala
E--> 4455      24435            24440            24445
     4456 Thr Leu Val Cys Lys Val Thr Gly His Pro Lys Pro Ile Val Lys Trp
E--> 4457      24450            24455            24460
     4458 Tyr Arg Gln Gly Lys Glu Ile Ile Ala Asp Gly Leu Lys Tyr Arg Ile
E--> 4459 24465            24470            24475            24480
     4460 Gln Glu Phe Lys Gly Gly Tyr His Gln Leu Ile Ile Ala Ser Val Thr
E--> 4461      24485            24490            24495
     4462 Asp Asp Asp Ala Thr Val Tyr Gln Val Arg Ala Thr Asn Gln Gly Gly
E--> 4463      24500            24505            24510
     4464 Ser Val Ser Gly Thr Ala Ser Leu Glu Val Glu Val Pro Ala Lys Ile
E--> 4465      24515            24520            24525
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       4466 His Leu Pro Lys Thr Leu Glu Gly Met Gly Ala Val His Ala Leu Arg
E--> 4467      24530           24535           24540
       4468 Gly Glu Val Val Ser Ile Lys Ile Pro Phe Ser Gly Lys Pro Asp Pro
E--> 4469 24545           24550           24555           24560
       4470 Val Ile Thr Trp Gln Lys Gly Gln Asp Leu Ile Asp Asn Asn Gly His
E--> 4471           24565           24570           24575
       4472 Tyr Gln Val Ile Val Thr Arg Ser Phe Thr Ser Leu Val Phe Pro Asn
E--> 4473           24580           24585           24590
       4474 Gly Val Glu Arg Lys Asp Ala Gly Phe Tyr Val Val Cys Ala Lys Asn
E--> 4475           24595           24600           24605
       4476 Arg Phe Gly Ile Asp Gln Lys Thr Val Glu Leu Asp Val Ala Asp Val
E--> 4477           24610           24615           24620
       4478 Pro Asp Pro Pro Arg Gly Val Lys Val Ser Asp Ala Ser Arg Asp Ser
E--> 4479 24625           24630           24635           24640
       4480 Val Asn Leu Thr Trp Thr Glu Pro Ala Ser Asp Gly Gly Ser Lys Ile
E--> 4481           24645           24650           24655
       4482 Thr Asn Tyr Ile Val Glu Lys Cys Ala Thr Thr Ala Glu Arg Trp Leu
E--> 4483           24660           24665           24670
       4484 Arg Val Gly Gln Ala Arg Glu Thr Arg Tyr Thr Val Ile Asn Leu Phe
E--> 4485           24675           24680           24685
       4486 Gly Lys Thr Ser Tyr Gln Phe Arg Val Ile Ala Glu Asn Lys Phe Gly
E--> 4487           24690           24695           24700
       4488 Leu Ser Lys Pro Ser Glu Pro Ser Glu Pro Thr Ile Thr Lys Glu Asp
E--> 4489 24705           24710           24715           24720
       4490 Lys Thr Arg Ala Met Asn Tyr Asp Glu Glu Val Asp Glu Thr Arg Glu
E--> 4491           24725           24730           24735
       4492 Val Ser Met Thr Lys Ala Ser His Ser Ser Thr Lys Glu Leu Tyr Glu
E--> 4493           24740           24745           24750
       4494 Lys Tyr Met Ile Ala Glu Asp Leu Gly Arg Gly Glu Phe Gly Ile Val
E--> 4495           24755           24760           24765
       4496 His Arg Cys Val Glu Thr Ser Ser Lys Lys Thr Tyr Met Ala Lys Phe
E--> 4497 24770           24775           24780
       4498 Val Lys Val Lys Gly Thr Asp Gln Val Leu Val Lys Lys Glu Ile Ser
E--> 4499 24785           24790           24795           24800
       4500 Ile Leu Asn Ile Ala Arg His Arg Asn Ile Leu His Leu His Glu Ser
E--> 4501           24805           24810           24815
       4502 Phe Glu Ser Met Glu Glu Leu Val Met Ile Phe Glu Phe Ile Ser Gly
E--> 4503           24820           24825           24830
       4504 Leu Asp Ile Phe Glu Arg Ile Asn Thr Ser Ala Phe Glu Leu Asn Glu
E--> 4505           24835           24840           24845
       4506 Arg Glu Ile Val Ser Tyr Val His Gln Val Cys Glu Ala Leu Gln Phe
E--> 4507 24850           24855           24860
       4508 Leu His Ser His Asn Ile Gly His Phe Asp Ile Arg Pro Glu Asn Ile
E--> 4509 24865           24870           24875           24880
       4510 Ile Tyr Gln Thr Arg Arg Ser Ser Thr Ile Lys Ile Ile Glu Phe Gly
E--> 4511           24885           24890           24895
       4512 Gln Ala Arg Gln Leu Lys Pro Gly Asp Asn Phe Arg Leu Leu Phe Thr
E--> 4513           24900           24905           24910
       4514 Ala Pro Glu Tyr Tyr Ala Pro Glu Val His Gln His Asp Val Val Ser
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E--> 4515        24915            24920           24925
     4516 Thr Ala Thr Asp Met Trp Ser Leu Gly Thr Leu Val Tyr Val Leu Leu
E--> 4517        24930            24935           24940
     4518 Ser Gly Ile Asn Pro Phe Leu Ala Glu Thr Asn Gln Gln Ile Ile Glu
E--> 4519 24945           24950            24955           24960
     4520 Asn Ile Met Asn Ala Glu Tyr Thr Phe Asp Glu Glu Ala Phe Lys Glu
E--> 4521        24965            24970           24975
     4522 Ile Ser Ile Glu Ala Met Asp Phe Val Asp Arg Leu Leu Val Lys Glu
E--> 4523        24980            24985           24990
     4524 Arg Lys Ser Arg Met Thr Ala Ser Glu Ala Leu Gln His Pro Trp Leu
E--> 4525        24995            25000           25005
     4526 Lys Gln Lys Ile Glu Arg Val Ser Thr Lys Val Ile Arg Thr Leu Lys
E--> 4527        25010            25015           25020
     4528 His Arg Arg Tyr Tyr His Thr Leu Ile Lys Lys Asp Leu Asn Met Val
E--> 4529 25025           25030            25035           25040
     4530 Val Ser Ala Ala Arg Ile Ser Cys Gly Gly Ala Ile Arg Ser Gln Lys
E--> 4531        25045            25050           25055
     4532 Gly Val Ser Val Ala Lys Val Lys Val Ala Ser Ile Glu Ile Gly Pro
E--> 4533        25060            25065           25070
     4534 Val Ser Gly Gln Ile Met His Ala Val Gly Glu Glu Gly Gly His Val
E--> 4535        25075            25080           25085
     4536 Lys Tyr Val Cys Lys Ile Glu Asn Tyr Asp Gln Ser Thr Gln Val Thr
E--> 4537        25090            25095           25100
     4538 Trp Tyr Phe Gly Val Arg Gln Leu Glu Asn Ser Glu Lys Tyr Glu Ile
E--> 4539 25105           25110            25115           25120
     4540 Thr Tyr Glu Asp Gly Val Ala Ile Leu Tyr Val Lys Asp Ile Thr Lys
E--> 4541        25125            25130           25135
     4542 Leu Asp Asp Gly Thr Tyr Arg Cys Lys Val Val Asn Asp Tyr Gly Glu
E--> 4543        25140            25145           25150
     4544 Asp Ser Ser Tyr Ala Glu Leu Phe Val Lys Gly Val Arg Glu Val Tyr
E--> 4545        25155            25160           25165
     4546 Asp Tyr Tyr Cys Arg Arg Thr Met Lys Lys Ile Lys Arg Arg Thr Asp
E--> 4547        25170            25175           25180
     4548 Thr Met Arg Leu Leu Glu Arg Pro Pro Glu Phe Thr Leu Pro Leu Tyr
E--> 4549 25185           25190            25195           25200
     4550 Asn Lys Thr Ala Tyr Val Gly Glu Asn Val Arg Phe Gly Val Thr Ile
E--> 4551        25205            25210           25215
     4552 Thr Val His Pro Glu Pro His Val Thr Trp Tyr Lys Ser Gly Gln Lys
E--> 4553        25220            25225           25230
     4554 Ile Lys Pro Gly Asp Asn Asp Lys Lys Tyr Thr Phe Glu Ser Asp Lys
E--> 4555        25235            25240           25245
     4556 Gly Leu Tyr Gln Leu Thr Ile Asn Ser Val Thr Thr Asp Asp Asp Ala
E--> 4557        25250            25255           25260
     4558 Glu Tyr Thr Val Val Ala Arg Asn Lys Tyr Gly Glu Asp Ser Cys Lys
E--> 4559 25265           25270            25275           25280
     4560 Ala Lys Leu Thr Val Thr Leu His Pro Pro Pro Thr Asp Ser Thr Leu
E--> 4561        25285            25290           25295
     4562 Arg Pro Met Phe Lys Arg Leu Leu Ala Asn Ala Glu Cys Gln Glu Gly
E--> 4563        25300            25305           25310
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     4564 Gln Ser Val Cys Phe Glu Ile Arg Val Ser Gly Ile Pro Pro Pro Thr
E--> 4565           25315               25320               25325
     4566 Leu Lys Trp Glu Lys Asp Gly Gln Pro Leu Ser Leu Gly Pro Asn Ile
E--> 4567       25330               25335               25340
     4568 Glu Ile Ile His Glu Gly Leu Asp Tyr Tyr Ala Leu His Ile Arg Asp
E--> 4569 25345               25350               25355               25360
     4570 Thr Leu Pro Glu Asp Thr Gly Tyr Tyr Arg Val Thr Ala Thr Asn Thr
E--> 4571               25365               25370               25375
     4572 Ala Gly Ser Thr Ser Cys Gln Ala His Leu Gln Val Glu Arg Leu Arg
E--> 4573           25380               25385               25390
     4574 Tyr Lys Lys Gln Glu Phe Lys Ser Lys Glu Glu His Glu Arg His Val
E--> 4575           25395               25400               25405
     4576 Gln Lys Gln Ile Asp Lys Thr Leu Arg Met Ala Glu Ile Leu Ser Gly
E--> 4577       25410               25415               25420
     4578 Thr Glu Ser Val Pro Leu Thr Gln Val Ala Lys Glu Ala Leu Arg Glu
E--> 4579 25425               25430               25435               25440
     4580 Ala Ala Val Leu Tyr Lys Pro Ala Val Ser Thr Lys Thr Val Lys Gly
E--> 4581           25445               25450               25455
     4582 Glu Phe Arg Leu Glu Ile Glu Glu Lys Lys Glu Glu Arg Lys Leu Arg
E--> 4583           25460               25465               25470
     4584 Met Pro Tyr Asp Val Pro Glu Pro Arg Lys Tyr Lys Gln Thr Thr Ile
E--> 4585           25475               25480               25485
     4586 Glu Glu Asp Gln Arg Ile Lys Gln Phe Val Pro Met Ser Asp Met Lys
E--> 4587           25490               25495               25500
     4588 Trp Tyr Lys Lys Ile Arg Asp Gln Tyr Glu Met Pro Gly Lys Leu Asp
E--> 4589 25505               25510               25515               25520
     4590 Arg Val Val Gln Lys Arg Pro Lys Arg Ile Arg Leu Ser Arg Trp Glu
E--> 4591           25525               25530               25535
     4592 Gln Phe Tyr Val Met Pro Leu Pro Arg Ile Thr Asp Gln Tyr Arg Pro
E--> 4593           25540               25545               25550
     4594 Lys Trp Arg Ile Pro Lys Leu Ser Gln Asp Asp Leu Glu Ile Val Arg
E--> 4595           25555               25560               25565
     4596 Pro Ala Arg Arg Arg Thr Pro Ser Pro Asp Tyr Asp Phe Tyr Tyr Arg
E--> 4597       25570               25575               25580
     4598 Pro Arg Arg Arg Ser Leu Gly Asp Ile Ser Asp Glu Glu Leu Leu Leu
E--> 4599 25585               25590               25595               25600
     4600 Pro Ile Asp Asp Tyr Leu Ala Met Lys Arg Thr Glu Glu Glu Arg Leu
E--> 4601               25605               25610               25615
     4602 Arg Leu Glu Glu Glu Leu Glu Leu Gly Phe Ser Ala Ser Pro Pro Ser
E--> 4603           25620               25625               25630
     4604 Arg Ser Pro Pro His Phe Glu Leu Ser Ser Leu Arg Tyr Ser Ser Pro
E--> 4605           25635               25640               25645
     4606 Gln Ala His Val Lys Val Glu Glu Thr Arg Lys Asn Phe Arg Tyr Ser
E--> 4607       25650               25655               25660
     4608 Thr Tyr His Ile Pro Thr Lys Ala Glu Ala Ser Thr Ser Tyr Ala Glu
E--> 4609 25665               25670               25675               25680
     4610 Leu Arg Glu Arg His Ala Gln Ala Ala Tyr Arg Gln Pro Lys Gln Arg
E--> 4611               25685               25690               25695
     4612 Gln Arg Ile Met Ala Glu Arg Glu Asp Glu Glu Leu Leu Arg Pro Val
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E--> 4613          25700          25705          25710
     4614 Thr Thr Thr Gln His Leu Ser Glu Tyr Lys Ser Glu Leu Asp Phe Met
E--> 4615          25715          25720          25725
     4616 Ser Lys Glu Glu Lys Ser Arg Lys Lys Ser Arg Arg Gln Arg Glu Val
E--> 4617     25730          25735          25740
     4618 Thr Glu Ile Thr Glu Ile Glu Glu Glu Tyr Glu Ile Ser Lys His Ala
E--> 4619 25745          25750          25755          25760
     4620 Gln Arg Glu Ser Ser Ser Ser Ala Ser Arg Leu Leu Arg Arg Arg Arg
E--> 4621          25765          25770          25775
     4622 Ser Leu Ser Pro Thr Tyr Ile Glu Leu Met Arg Pro Val Ser Glu Leu
E--> 4623          25780          25785          25790
     4624 Ile Arg Ser Arg Pro Gln Pro Ala Glu Glu Tyr Glu Asp Asp Thr Glu
E--> 4625          25795          25800          25805
     4626 Arg Arg Ser Pro Thr Pro Glu Arg Thr Arg Pro Arg Ser Pro Ser Pro
E--> 4627     25810          25815          25820
     4628 Val Ser Ser Glu Arg Ser Leu Ser Arg Phe Glu Arg Ser Ala Arg Phe
E--> 4629 25825          25830          25835          25840
     4630 Asp Ile Phe Ser Arg Tyr Glu Ser Met Lys Ala Ala Leu Lys Thr Gln
E--> 4631          25845          25850          25855
     4632 Lys Thr Ser Glu Arg Lys Tyr Glu Val Leu Ser Gln Gln Pro Phe Thr
E--> 4633          25860          25865          25870
     4634 Leu Asp His Ala Pro Arg Ile Thr Leu Arg Met Arg Ser His Arg Val
E--> 4635          25875          25880          25885
     4636 Pro Cys Gly Gln Asn Thr Arg Phe Ile Leu Asn Val Gln Ser Lys Pro
E--> 4637     25890          25895          25900
     4638 Thr Ala Glu Val Lys Trp Tyr His Asn Gly Val Glu Leu Gln Glu Ser
E--> 4639 25905          25910          25915          25920
     4640 Ser Lys Ile His Tyr Thr Asn Thr Ser Gly Val Leu Thr Leu Glu Ile
E--> 4641          25925          25930          25935
     4642 Leu Asp Cys His Thr Asp Asp Ser Gly Thr Tyr Arg Ala Val Cys Thr
E--> 4643     25940          25945          25950
     4644 Asn Tyr Lys Gly Glu Ala Ser Asp Tyr Ala Thr Leu Asp Val Thr Gly
E--> 4645          25955          25960          25965
     4646 Gly Asp Tyr Thr Thr Tyr Ala Ser Gln Arg Arg Asp Glu Glu Val Pro
E--> 4647     25970          25975          25980
     4648 Arg Ser Val Phe Pro Glu Leu Thr Arg Thr Glu Ala Tyr Ala Val Pro
E--> 4649 25985          25990          25995          26000
     4650 Ser Phe Lys Lys Thr Ser Glu Met Glu Ala Ser Ser Ser Val Arg Glu
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VERIFICATION SUMMARY   DATE: 05/30/2001
PATENT APPLICATION: **US/09/759,508A**   TIME: 11:49:03

Input Set : **A:\00786.381002.SEQLIST.TXT**
Output Set: **C:\CRF3\05302001\I759508A.raw**

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L:2663 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2
L:2665 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2
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